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Real and Ideal Television News Images: a Q-Analysis.

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REAL AND IDEAL TELEVISION NEWS IMAGES:
A Q-ANALYSIS

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
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in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Department of Speech

by
Jeffrey Neil Simon
B.S., The Ohio State University, 1967
M.A., The Ohio State University, 1969
August, 1976

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ABSTRACT

Television has become the dominant conveyer of news; more people rely on television news for their information on current events than on either radio or the print media. Broadcasters, especially at the local station level, are also using television news to help satisfy the government's requirement of serving the public interest. With such emphasis upon this program type, it seems advisable to investigate ways to improve the quality of television news in order to better satisfy both the viewers' and the broadcasters' needs.

Little is known about audience composition. The "success" of a news format is measured primarily in terms of the "rating" and the "share." Crucial management decisions are made on the basis of this quantitative data, gathered after a program is broadcast. It is the premise of this study that such decision-making requires additional information. Qualitative data about the nature of the viewing audience, when combined with traditionally-available information on previous program acceptance, can increase the probability that a television news format will satisfy both the viewers' and the broadcasters' needs. This investigation demonstrates the application of Stephenson's Q-Methodology as a tool capable of generating this information.

Using "Q", it is possible to determine what elements of television news are important to individual viewers. It is a psychological instrument, rather than a sociological survey and is not necessarily concerned with the proportion of viewers who share similar ways of thinking. It is used here as a tool for isolating images which viewers hold for news programming on the three commercial television stations in Baton Rouge, Louisiana. Hypothesized "average" and "ideal" news program images are also generated and compared to the "real" station news images.

Since classifications of respondents were more valuable than their number, a structured sample was used. Ways of thinking about television news were derived from focused interviews. A series of statements describing a possible news format and incorporating these concepts was composed and their validity and reliability assured. Respondents selected primarily on the basis of age, race and educational background were requested to sort the statements along a continuum from "most descriptive" to "least descriptive" of their perception of a given station's news programming. This was done for each of the five images investigated, the responses computer correlated and the results factor analyzed.

A number of images were discovered for each of the criteria, but the first one for each station proved to have the highest statistical reliability. The results were useful in two ways: they provided immediate feedback to

the local station managers concerning the images viewers hold for each station's news; and they demonstrated the feasibility of using Q-methodology as a tool for identifying qualitative audience information. It is hoped this study will help broadcasters and the public fully exploit the potential of television news.

CHAPTER I

INTRODUCTION AND ORIENTATION

The Commission, if public convenience, interest or necessity will be served thereby, subject to the limitations of this chapter, shall grant to any applicant therefor a station¹ license provided for by this chapter.

Exactly what Congress meant by the "public convenience, interest, or necessity" in its directive establishing the Federal Communications Commission and its powers in the Communications Act of 1934 is still an intensely controversial issue. This is true because, although the Act refers to this multiple concept many times, nowhere is it concretely defined. Nor has the Commission in its forty-two year history assumed the responsibility for setting forth such a definition. Instead, the burden of serving the "public convenience, interest or necessity" has been mandated to the station licensee with the expectation that proof of such services shall be demonstrated at license renewal time every three years.

The broadcaster's task is further complicated by the very nature of the electronic media in the United

¹Federal Communications Commission. "Licenses: allocation of facilities; terms; renewals," Sec. 307, cited in Donald M. Gillmore and Jerome A. Barron, Mass Communication Law: Cases and Comment ("American Casebook Series"; St. Paul, Minnesota: West Publishing Co., 1969), p. 810.

States. Excluding the Public Broadcasting System, established by Congress in 1967 through the Public Broadcasting Act "to stimulate the development of non-commercial educational broadcasting,"² the structure of American broadcasting is such that it is supported by, and, thus must serve, the mercantile portion of our society. The origin of this system reaches back to the Radio Act of 1927 and the Communications Act of 1934 which laid the groundwork for incorporating the electronic media into the free enterprise system. Scattered attempts to re-direct the commercial nature of American broadcasting into something akin to the government-supported British Broadcasting Corporation have since led to fears of censorship or some form of authoritarian intervention. Broadcasters have protested these efforts on the basis of trade restraint. It seems a safe assumption at this time that the deeply imbedded commercial nature of American broadcasting will not substantially alter its identity in the foreseeable future.

It is not the purpose of the present investigation to support or criticize the structure of the American electronic media. The fact exists that survival for the station licensee means satisfying the demands of two separate and, at times, conflicting masters, i.e., the government and the advertisers. Rather, it is this study's

²Gillmore and Barron, p. 760.

goal to provide a framework which has the potential of helping the broadcaster serve both the public, as the government requires, and the advertisers, as the reality of the business world requires.

The present study, then, is based on the premise that traditional rating services do not provide enough information for the broadcaster to make intelligent decisions; thus, they do not deserve the heavy emphasis that is placed upon them. In an effort to remedy this situation, the following chapters will present a methodology aimed at providing additional information about the nature of the viewing audience. When used in conjunction with traditional rating services, program decisions, specifically regarding television news, could be made with a more complete understanding of the viewer's needs, wants and desires. Theoretically, the public interest could then be better served than is currently the case.

Statement of the Problem

Through the years, broadcasters, especially at the local station level, have turned primarily to news programming to help satisfy the government's requirement of serving the public interest. This point is stressed when, in a discussion of local television's profit-making potential for its news, it is suggested that a local station's news has been used "to fulfill its obligations

as a licensee on the public airwaves."³ This interpretation of the government's definition of the "public convenience, interest, or necessity" has perhaps been motivated by the amount of emphasis the Commission places on this type of programming when the licensee re-applies for use of a frequency. For example, the license application renewal form used from 1969 through 1975 asked the licensee to specify the total percentage of air time for (1) News; (2) Public Affairs; and (3) All Other Programs. . . .⁴ Such a trichotomy served as a clear indication of the relative importance the Commission placed on each of the three categories. The Commission revealed a further emphasis on news and public affairs programming in 1972, when it required licensees to file a yearly report on its programming.⁵ Consequently, the revised license renewal form for 1975 omits a statement of past programming entirely.⁶

Many people who were born before World War II can recall the efforts of television's first newscaster, John Cameron Swazey. Sitting at a desk with a background of clocks pointing to the differing hours of the day or night

³"Local Television's Best Foot Forward," Broadcasting, January 5, 1976, p. 82.

⁴"Application for Renewal of Broadcast Station License," Form 303, February, 1969, Section IV-A, Part II Past Programming.

⁵"FCC Annual Report", Form 303-A, January, 1972.

⁶"Application for Renewal of Broadcast Station License," Form 303, January, 1975.

in key cities around the world, Mr. Swazey took the first incursion into television news programming.

As the differences in the nature of the entertainment offerings of the three networks tended to decrease, the image of each network became more reliant upon its sports contracts and on its offerings in the field of news and public affairs.⁷

During the 1963-1964 season, the Roper Poll first disclosed the information that television was the public's major source for news.⁸ Consequently, as a result of television broadcasters' awareness of the public's dependence on the medium for information, the three networks averaged about six times as much news coverage during the 1963-1964 season as they had at television's inception, some fifteen years earlier. And it was during this season, too, that the three networks committed themselves to spend some seventy million dollars, the most in their history, for the production of news and documentary programs for the

⁷Ward L. Quall and Leo A. Martin, Broadcast Management: Radio + Television ("Studies in Media Management," A. William Bluem, Gen. Ed.; New York: Hastings House, Publishers, 1968), p. 97.

⁸Burns W. Roper, Emerging Profiles of Television and Other Mass Media: Public Attitudes, 1959-1969. A Report by Roper Research Associates, Inc. (New York: Television Information Office. 745 5th Avenue.). Roper Research Associates, Inc. has been a public opinion research organization for more than thirty years.

season. It was also during this year that both NBC and CBS doubled the length of their evening newscasts.⁹

In 1976, news programming of both local and global events remains in the forefront of television's philosophy. All three major networks include a news broadcast in the late afternoon and provide similar versions on the weekends. Local affiliates and independents, too, schedule daily news offerings. Each provides at least one half-hour and, frequently, one or more hours of television news each day.

The quantity and quality of local market television news is often in direct proportion to the size of the community and the station's budget. The larger the community and the more resources the station has at its disposal, the greater the degree of sophistication of the locally-produced program. But, as one critic suggests, "At some stations, whatever local programming does get on the air is hardly ever distinguished or distinguishable."¹⁰ If this is true, it may be because the station lacks a creative staff, does not understand creative programming and production, lacks sensitivity to the public's needs and desires or simply is not interested in quality programming.

⁹Quall and Martin, pp. 97-98.

¹⁰Quall and Martin, p. 108.

Whatever the reasons for mediocre news programming at some television stations may be, the fact remains that for many local stations, news presentations are the only locally-produced shows. A station's image often rests solely with the amount of audience acceptance of its news. Usually, the program format is divided into three parts: a "hard" news presentation, sports events and a weather forecast. Slight variations on this theme may also appear from market to market. A station will usually carry an on-going promotional campaign, touting its news as "accurate" and its news reporters as "professional" and "appealing." Since the Federal Communications Commission seems to be primarily interested in the quantity and quality of a station's public affairs programming, including news, as previously noted, and since a station's advertising rate is frequently highest for its news, then the number of people a station can claim as its "news viewers" is of primary importance to management. Consequently, there is a continuous campaign to attract viewers.

News consultants are a relatively recent phenomenon in the television news business. These highly-paid consultants are hired to critique a station's news programming and, consequently, attract more viewers. As Phil McHugh of the news consulting firm, McHugh and Hoffman Incorporated, comments:

The old idea that if you got to be first in your market, you were first for life, just doesn't exist anymore.¹¹

But the approximate dozen of professional, full-time, television news consultants have not proven to be a panacea for station managers trying to satisfy the government and their pocketbooks simultaneously.

Consultants are controversial; they have tread [sic] on the preserve traditionally guarded jealously by the station news director. But their success is not to be denied.¹²

While some firms, such as the Frank Magid Corporation in Marion, Iowa, claim better than fifty per-cent success rates in turning stations into number one market leaders and some stations which have been successful with a news consultant, such as KPRC-TV in Houston, speak well of them, others disagree. Station spokesmen, primarily news directors, view news consultants as "gimmicks." WNAC-TV was rated number three in Boston, the nation's fifth-largest market. After obtaining and then terminating the services of Frank Magid, the station, under its own efforts, earned a rating of "first" on its six o'clock news and "second" on its eleven o'clock news. Station

¹¹Broadcasting, January 5, 1976, p. 82.

¹²Broadcasting, January 5, 1976, p. 82.

spokesman, James Coppersmith, commented,

In the news area, I just don't think you can abdicate news judgment to some guy in Iowa you send a show to once a month and get a grade on, like Journalism 101.³

It is a continuing controversy that has polarized broadcasters. KPRC-TV, Houston's Ray Miller says that "Frank Magid is the greatest thing that ever happened to broadcasting,"¹⁴ while Ralph Renick of WTVJ-TV in Miami likens news consultants to

. . . the Soviet army in World War II. They come in to liberate and end up like an army of occupation. . . .¹⁵

But, whether news consultants prove useful or useless to their respective clients, their very presence emphasizes the fact that competition for news viewers between stations in a market area is keen.

The number of television stations has increased in the past few years, thus putting more pressure on intra-market competition.¹⁶ This is compounded by the number of CATV or cable systems more than doubling in the past

¹³Leslie Fuller, "News Doctors: Taking Over TV Journalism?" Broadcasting, Vol. 87 (September 9, 1974), p. 23.

¹⁴Fuller, Broadcasting, Vol. 87, No. 11, p. 22.

¹⁵Fuller, Broadcasting, Vol. 87, No. 11, p. 22.

¹⁶Broadcasting Yearbook records that the number of stations, both UHF and VHF, on the air in 1974 as commercial operations was 710. This compares to just 586, ten years earlier.

ten years.¹⁷ Baton Rouge, alone, has recently added an educational outlet, WLPB-TV, Channel 27, and a cable system to its three commercial stations. The emergence of commercially-feasible cartridge systems is imminent.¹⁸

With this proliferation of outlets and, consequently, accompanying increase in competition, it seems advisable that television news audiences be divided in a more specialized way than they have been in the past. Perhaps, rather than aiming for the mass of the "average viewing public," it would be more in the economic interests of a station if it decided to capture one particular group of people who have similar or identical buying patterns for its news programming and sell advertising on that basis. In this way, the "public convenience, interest, or necessity" can perhaps be better served than is currently the case. And, theoretically, by so doing, advertising revenues can also be increased.

The problem of identifying these audience segments, their nature and preferences, began to show promise of serious investigation when, in the latter part of the 1960's, Stephenson's Q-Methodology, which had been used with considerable success in other research areas, was

¹⁷According to Broadcasting Yearbook, there were 1,004 CATV systems in operation in 1964; the latest estimates are over 3,000.

¹⁸"Soon the Home Video in Color," Broadcasting, March 30, 1970.

adopted to the area of qualitative audience measurement. This technique and its underlying philosophy is described in the following chapter. It was shortly thereafter that work began to appear in the mid-west that showed promise of offering an alternative methodology to audience measurement, one that would help to satisfy critics of the ratings' status-quo and one that would provide the necessary qualitative audience measurement which traditional quantitative rating services could not provide.

In 1968, the Educational Broadcasting Review published a three-part series, the first of which laid the groundwork for qualitative audience research by establishing a need. The second paper in the series offered a concrete methodology for conducting in-depth, qualitative audience research and the final paper presented an actual case study which utilized the suggested procedure.-- It behooves the writer, at this point, to examine the first two of these contributions as significant steps in the application of Q-methodology to audience research and to help clarify the current problem under investigation.

The author of the first paper, Finney, began by tracing the evolution of ratings criticism from the early congressional investigations to the then-current form of such attacks.¹⁹ He lent particular attention

¹⁹Robert G. Finney, "Do We Need Another TV Rating Study?", Educational Broadcasting Review, II (February, 1968, pp. 27-35.

to the findings of that subcommittee of the House Committee on Interstate and Foreign Commerce and also reviewed the establishment and findings of the self-regulatory agencies which grew out of the congressional investigation. The work of ARMS, CONTAM and COLTRAM is discussed later in this chapter.

Finney also underscored the increasing number of calls for better program quality and less emphasis on ratings and concluded that

It is clear that current methodologies tell us nothing about program quality and relatively little about audiences beyond simple demographics. It is equally apparent that broadcasting in the public interest requires that decisions be made on the basis of the best information possible. Measures of sets-in-use fall far short of this, and the excuse that "it's the only game in town" does not alter the fact that a great need exists for something better.

Finney suggested that the "something better" are new research methodologies which can predict in advance of program inception and production the interests and tastes of various audience segments. This, he said, would provide the broadcaster with three significant pieces of information: (1) an indication of the probable success a program will receive in a national or local market; (2) a solution to determining the interests, needs and wishes of a substantial segment of the viewing market potential, some forty-per cent of which includes individuals classified as nonviewers; and (3) an indication of how to make quality cultural and educational programs appeal to a larger audience than is currently the case.

James T. Aubrey, a past president of the CBS network once said,

Ideally, the public response to television programs would include in depth analysis of each individual's reactions and desires. It would also establish the degree to which people like what they see on television, and indicate what people would like to see that is not available.²⁰

Aubrey went on to say that this "ideal" was virtually unattainable. However, Finney suggested that recent experimental developments (such as Q-methodology) have brought this ideal closer to reality. And he appealed for the further testing and use of such procedures.²¹ This, in effect, explored alternatives to large sample techniques and provided the framework for the second paper in the EBR series.

In that next work, "Creative Strategies in Audience Analysis,"²² Monaghan enlarged upon the theoretical rationales of the preceding paper and examined new means of looking at viewers or listeners. Monaghan's argument is entirely theoretical, but sound. He set forth the premise that quantitative audience research is a reflection

²⁰Hearings before the Special Subcommittee on Interstate and Foreign Commerce on Broadcast Ratings, 88th Cong., 1st Sess., pt. 2 at 1780 (1963); and cited in Finney, Educational Broadcasting Review, II (February, 1968), p. 34.

²¹Finney, Educational Broadcasting Review, II (February, 1968), p. 35.

²²Robert R. Monaghan, "Creative Strategies in Audience Analysis," Educational Broadcasting Review, II: 2 (April, 1968), pp. 29-37.

of a mechanized and dehumanized society, the treatment of individuals as numbers, with the resultant product a mass of autonomous statistics. He decried this condition, wondering why ". . . something as human as communication, cannot represent some of the human-ness it pretends to study."

Two possible solutions to this seeming paradox are offered in the Monaghan article, both serving as reasons why the science of audience prediction and analysis has not progressed farther than is currently the case. One is that people believe that it is simply impossible to predict audience behavior and all attempts to this end are doomed to failure. The other view, according to Monaghan, lies at the opposite end of the continuum, that the science of prediction is somehow "evil" and can yield information which it is best not to know. Both views imply rejection and both views, it is argued, are wrong. Prediction of human behavior is possible with contemporary theories and modern technology, but not in the "absolute" sense; since the researcher is concerned with human beings and not with computers, there is always room for error. Yet, such prediction is essential in matters of human concern, for man's reality lies within, rather than without and it is here that the behavioral scientist must search for answers to important social problems.

Monaghan argues that the starting point for such inquiry lies within the psychological readiness of the researcher to accept variations in the way people structure their inner worlds. Using psychologist Carl Rogers' "client-centered" therapy approach as an example, the suggestion was advanced that the researcher who seeks to understand the nature of audience behavior must first understand how the viewer thinks and feels and acts from his own frame of reference. If this requires the behavioral scientist to become more subjective than his physical scientist counterpart, then this variance from tradition should not become a barrier to probing into the human psyche.

If we remain aloof from human experience, the intuitive and feeling response, we will see only the superficialities of what happens to be visible from the outside. But if we can engage ourselves . . . as person as well as scientists in what the experience means [to one person] we may find some fascinating glimpses into the realities of human existence . . . that would otherwise never have occurred to us.

Every person bases a decision upon an expectation of the outcome; simply looking at the number of people who make a particular decision tells the researcher nothing about the criteria used to make that decision. "And such understanding is a necessary prelude to matching program content to target audience."

This knowledge of personal choices can best be obtained, Monaghan says, in the natural environment in which these choices are made. And since man is basically

a gregarious creature, his choices are usually made in a social context. Thus, the audience researcher would be wise to elicit information concerning personal decision-making in a context similar or identical to the respondent's normal decision-making environment--not the experimental laboratory perhaps, but the living room. Such information gleaned from a series of individuals representing a small, but widely-ranging sample could provide what may approximate an infinite number of variables. From these, the researcher can select those which appear to be operating most intensely across individual barriers. Hypotheses are thus of what the world looks like from the vantage point of the variable that is ultimately most important, the viewer.

Later, these hypotheses can be converted into tangible alternatives which are relevant to the researcher's goals. They may be entirely new program concepts or, in the case of the current investigation, statements of television news images. Since the researcher cannot assume that the viewer is consciously aware of all known choices, the viewer must be helped in his efforts to express his preferences. One method of doing this is to provide him with a total pool of program or image alternatives from which to choose. Such a procedure resembles the actual choice context before a television receiver, but in this situation, there is a greater freedom of expression, since there are more programs from which to select. The results can then be treated statistically,

as by Stephenson's Q-technique, and the outcome used by interested parties to better structure their existing formats.

Monaghan concludes by suggesting that a higher order of practical theory in audience analysis is necessary to be both scientifically defensible and also useful to the media specialist. Such a theory can imply the existence of viewer "types" who are highly correlated with one another. Kinds of viewers can then be identified rather than simply numbers.

Given such findings, a producer or anyone involved in the planning of media messages can, if he wishes, incorporate the qualities of audience preference into a program with some expectations that those qualities or elements will be favorably received.

Monaghan's thesis, in summary, suggested a theoretical rationale and general methodological strategy for qualitatively analyzing a potential viewing audience. The implicit goal would be to create program concepts or advertising concepts or image concepts that could be meaningfully attached to target audiences. In the third part of the EBR series, Joseph T. Plummer translated this audience analysis strategy into a program idea from its inception through telecast.²³ This study is described in detail in the following chapter.

²³Joseph T. Plummer, "Audience Research in Television Program Development," Educational Broadcasting Review, Vol 2, No. 3 (June, 1968), pp. 23-30.

The Rating Services and the Audience

One way of approaching the goal of "audience specialization" is to find out as much as possible about "who is out there," i.e., of what kinds of people and groups the audience is composed. Unfortunately, little information is available in this direction. As Quall suggests, broadcasters know that the audience is composed of many diversified publics and that each of these smaller units has its own particular interests.²⁴ Exactly "how" the broadcaster has come upon this information is unclear, but the writer suggests it has been more through intuition than empirical observation.

Rather than examining the viewers to learn the nature of the audience, broadcasters have been primarily obsessed with "how many" are out there. Top echelon management at the network and local levels use this information for at least two purposes: first, to determine whether a program should remain on the air in its present form, remain on the air in a changed form or be cancelled; and second, to determine the rates advertisers will be charged for air time. These statistics assume two forms.

²⁴Quall and Martin, p. 55.

The "rating" is

. . . a survey estimate of the size of an audience, expressed as a percentage of the total group sampled. Ratings describe the average minute or broadcast-reach level for television. . . . They can be expressed on a household or "person" basis.²⁵

A "rating" of 32.5, for example, means that 32.5 per cent of all the television households in the country watched a particular program at the time of the survey.

A program's "share," on the other hand, " . . . is the percentage of the total number of viewing households tuned to a program."²⁶ It is

[T]he percentage of the total TV viewing audience in a given time period tuned to a particular station or network program. A share measurement is often more useful than a rating because it offers a relative indicator of popularity and is not influenced by set-usage variations at different times of the evening.²⁷

In the preceding example, if some 56.5 million households have their televisions turned on, with 32.5 million watching one program, that particular program has captured fifty-eight per cent of the audience and, thus, has a "share" of 58.

Of course, both figures represent only gross totals; they are further broken down into specific

²⁵William A. Gleason (ed.), A Glossary of Radio and Television Terms (New York: Catholic Communications Foundation, Inc., 1971), p. 35.

²⁶Richard A. Blake, "Tv's Tyranny of the 12 Hundred," America, December 23, 1972, p. 550.

²⁷Gleason (ed.), p. 39.

categories of audience numbers. Typically, quarter-hour segments or programs are described in terms of age categories of viewers, sex, race, etc. Potential advertisers will examine these category break-downs and select the available air time during which large numbers of an audience with a specific "demographic" description are viewing. For example, Cadillac dealers may be interested in reaching high-income audiences; a drug company which manufactures acne medicine may wish to sponsor in whole, or in part, a program which reaches a large number of teen-agers.

Ratings, as they are used today, are not judgments of quality, contrary to the term's connotation. They are measurements, a statistical sample of how many households watch certain programs on television. There are six major ratings services to which networks, local affiliates, independents and some advertising firms subscribe. Each has the same goal, i.e., to derive an audience rating and share. A brief discussion of these services will help establish the groundwork and rationale for the present study.

American Research Bureau

Described as one of the "big four" among audience research concerns in 1961, along with Trendex, Nielsen

and Pulse,²⁸ ARB is ranked among the "top three" by Quall in the late 1960's.²⁹ Trendex was not included as a major research organization in the latter discussion.

The Bureau makes primary use of an electronic device called an "Arbitron" to conduct its research in seven large cities but also includes an overnight national survey which uses both the meters and telephone interviews, national television surveys which use diaries and local surveys which also use diaries.

A. C. Nielsen Company

Another of the leading audience research organizations, Nielsen, is often criticized for its great impact on television programming. It employs two major rating techniques. The first is the Nielsen Television Index Service (NTI), which also uses an in-home electronic device called the Audimeter to obtain national ratings. The Nielsen Station Index (NSI) is used to obtain local station ratings and employs the diary method.

The Pulse, Incorporated

Pulse is not only a ratings organization, but also a marketing firm in that economic and demographic charac-

²⁸Harrison B. Summers, "Qualitative Information Concerning Audiences," Journal of Broadcasting, V, No. 2 (Spring, 1961), p. 148.

²⁹Quall and Martin, p. 45.

characteristics of viewers are presented with the ratings. It is the only major rating firm which employs personal interviewing at the respondent's home. Using the "aided recall" technique in which the interviewer leads the respondent in a less than totally open-ended situation, the interviewing is carried on between the hours of five and eight in the evening when most people are home.

Interviewing "blocks" are used in the randomly-selected counties and one call-back is made to households not at home at the first call during the national survey. In the local rating surveys, no call-backs are made.

Trendex, Incorporated

Although both ARB and Nielsen currently use devices which provide immediate ratings feedback--ARB with its Arbitron and Nielsen with the Audimeter--Trendex was the first research organization in broadcasting to develop an instantaneous, overnight rating service.³⁰ From its inception in 1950 through the middle of 1961, Trendex made a thousand telephone calls in twenty-five cities every half-hour, rating only the evening programs of the networks. After June of 1961, Trendex terminated preparation of these national reports and functions now only upon special order from the networks or agencies.

³⁰Quall and Martin, p. 45.

This is probably the reason why Trendex was ranked among the leading rating services in the early 1960's, but was omitted from a similar list a few years later.³¹

C. E. Hooper, Incorporated

This rating firm is incidental to the purpose of the present study, since Hooper currently is concerned only with radio ratings. But, as one of the first firms established for the purpose of audience measurement, Hooper used the telephone technique to provide monthly ratings of sponsored network programs. In its "heyday," the "Hooper rating was a powerful factor in the determination of the success or failure of many network programs."³² However, in 1950, Hooper's services were purchased by the A. C. Nielsen Company which terminated Hooper's national ratings operation. Hooper's audience measurement ratings for radio are still used on the local market level.

The procedure continues to use telephone interviews in toll-free areas only, with no personal visits by the relatively small field staff. Each interviewer selects numbers to call from a subsection of the telephone directory; there is no systematic design used for this selection. A minimum Hooper survey consists of some

³¹See the above discussion, p. 19.

³²Quall and Martin, p. 44.

nine-hundred telephone calls containing information regarding radio listening for the fifteen minute period preceding the call.

TV-Q

An organization called TV-Q deserves special consideration, since it parallels, in part, the type of research upon which the present study is based. First, the viewer is asked to rank a series of programs according to personal acceptance or rejection of them. This is similar to the Q-sorting procedure which characterizes Q-methodology. Second, it is a device which goes beyond the collection of demographic data. The end result of TV-Q is to identify, qualitatively, personal preferences for television programs. To the extent that it is, in fact, qualitative, it may be placed within the same conceptual framework as Q-methodology.

Begun in June, 1958, TV-Q is a service based less on quantitative measurements such as the traditional rating systems discussed above, and more on in-depth probing of viewers' ways of thinking regarding television stimuli. Its description is perhaps best characterized in this way:

[It] measures programs' intrinsic appeal to individuals. [It] makes possible prediction of program preference, measurement of its basic strengths and weaknesses, and detailed definition of the kinds of people to whom it appeals most. In many instances, you can predict the success or failure of a new show after only a few telecasts.³³

Tv-Q ratings are computed and published each month by Entertainment Research Associates of Port Washington, New York, an affiliate of Home Testing Institute of the same city. Each month, approximately twenty-one hundred members of about seven-hundred, fifty families across the nation are asked to complete a questionnaire which lists some two-hundred television programs. Each is asked to score the programs according to the following scale:

1 = One of my Favorites; 2 = Very Good; 3 = Good; 4 = Fair; 5 = Poor; or 6 = Never have seen the program. The questionnaires are then returned to the firm, the results tabulated and the programs are assigned two scores. The "f" score represents a "familiarity" rating, i.e., the respondent percentage which checked any of the boxes numbered one through five--that was familiar with the program. The actual "Q" rating is derived from only the percentage of respondents which checked the first box, "One of my Favorites." The other categories of opinion are apparently just placed on the ballot to satisfy and

³³William G. Madow, Evaluation of Statistical Methods Used in Obtaining Broadcast Ratings, Report of the Committee on Interstate and Foreign Commerce, 87th Cong., 1st Sess., 1961, H. Rept. 193. p. 120.

placate the respondent. The formula used to derive the TV-Q rating is: number of respondents voting for category number one, divided by the total number of votes in the poll minus those who indicated they were not familiar with the show.³⁴ For instance, if fifty of one hundred fifty people checked the last box, then a certain program's familiarity rating would be two-thirds or $f = 66$. Then, if thirty of the remaining respondents checked the first box, it would indicate that, in this case, thirty per cent of the viewers who were familiar with the program considered it one of their favorites; thus the rating would be, $Q = 30$. Theoretically, if the sample of respondents was an accurate cross-section of the viewing public, as the TV-Q firm claims, then it can be concluded that the thirty per cent favoritism rating will remain constant even when the initial "unfamiliar" respondents get to know the program.

It should be noted, however, that a high Q rating does not necessarily mean a high audience rating when converted into quantity rather than quality, such as by a Nielsen or ARB rating. A particular program which is of a potentially high quality can produce a high Q rating the first time it is aired, although ninety percent of the viewing public may not be aware of its existence.

³⁴"New Firm Rates TV 'Quality'," Broadcasting, August 11, 1958, p. 34.

When the Nielsens are then published for that particular rating period, there will be a large discrepancy between the two figures. On the other hand, TV-Q can serve as a valuable predictive instrument in this context. If the Q rating is initially high, then producers and advertisers have a basis for optimism. Perhaps by allowing the program to remain on the air, aided by a good promotional campaign, the "f" rating will rise and, perhaps along with it, the other quantitative ratings.

The TV-Q rating service is not designed to replace the quantitative rating measurements, but rather to supplement them.

TvQ data used along with regular audience ratings and other information is frequently used by subscribers to predict future audience ratings of new and returning programs and programs switching time periods. Up and down trends of audience appeal as measured by TvQ may indicate far in advance the future direction of a program's audience ratings.³⁵

TV-Q ratings are, in effect, a qualitative indication of the viewing public's state of mind in an absolute sense. The Q rating refers only to a particular program, in isolation, and is not influenced by lead-in or lead-out programs or by competitive programs in the same time period. Henry Brenner, President of Home Testing

³⁵Home Testing Institute/TvQ In., TvQ National Service, Report #8, March, 1969, p. 2 and reprinted in Lawrence W. Lichty and Joseph M. Ripley II, American Broadcasting: Introduction and Analysis: Readings (Madison, Wisconsin: College Printing and Publishing, Inc.; 2nd ed., 1970), p. V-292.

Institute, Incorporated, which markets the TV-Q service, has suggested his ratings can serve the broadcaster in four ways. They could

1. help a person predict whether a show will be a hit or a flop long before option time;
2. help a sponsor judge future rating trends of shows on the air, including those that have switched time periods;
3. help subscribers select the best time slot for a show, the most productive period for an audience-promotion campaign and the time to doctor a show to keep it healthy; and
4. show program appeal by sex, age, income, education and other groupings.³⁶

In November, 1957, during the trial testing year prior to becoming a commercial service, TV-Q reported that of the ten new shows with the highest Q ratings, each was renewed with eight becoming established hits. Of the ten new shows with the lowest Q ratings for that season, all were taken off the air.³⁷

Thus, the Tv-Q service is a qualitative index of a program's value and merit. It is, in effect, a "liking" score, with the underlying assumption that a respondent who indicates a positive attitude toward a certain program will also attend to it. The validity of this assumption, however, remains to be proven. Nevertheless, it is a

³⁶"TV-Q Ratings Aim to Ascertain Shows' Qualitative Standings," Advertising Age, 29 (August 11, 1958), p. 28.

³⁷Broadcasting, August 11, 1958, p. 34.

service that is not duplicated by any of the quantitative measurement services previously listed. It should also be noted that this service, like the others, still functions in an "after-the-fact" situation. That is, the ratings are generated after a large amount of time, money, facilities and personnel are invested in the program's production. The present study, described in detail later, attempts to overcome this fundamental weakness by employing a procedure which can help insure against a program's failure before it is produced and aired.

Although TV-Q perhaps most closely approximates a true qualitative index of a program's performance, it is by no means the only one of the services to attempt to gather such data. Some of the services already discussed for their quantitative ratings also offer clients certain demographic and other behavioral information about viewers. Both ARB and Trendex offer data as to the proportions of of men, of women and of children in the audience of each network program. ARB details such items as the average size of families tuned to a given program, the number of heads of families and housewives in various categories tuned to a given program, the number of male and female viewers per set, etc. Trendex, in its prime, went even further:

It may be mentioned that Trendex alone of the "big four" in the network program rating field offers any information that bears on the subjective evaluation of the program by individual listeners; both the section giving the telephone respondent's classification of the program series and the section showing the percentage of homes in which the selection was made by each type of listener gives readers of the report information going somewhat beyond the actual composition of the program audience.³⁸

Pulse also gives certain descriptive information about the viewing audience, such as income categories, food expenditure categories, percentage of families with children under two years of age, percentage of families containing five or more individuals and types of families in which the household head is a professional man or a laborer. The greatest proportion of the information supplied by Pulse concerns characteristics of the audience with respect to consumption of various kinds of commercial products.

Nielsen, too, provides clients with various types of viewing audience descriptions. Its National Television Audience Composition Report presents for each program time period the average number of viewers per viewing family and the percentages of total viewing audience made up of men and women in various age groupings. Another table in the Report shows the percentage of the

³⁸Summers, Journal of Broadcasting, V, No. 2 (Spring, 1961), p. 154.

total audience consisting of men, women, teen-agers and children for each of a number of "types" of programs, such as comedy, drama, etc.³⁹

While such "qualitative" information as supplied by the commercial rating services has been helpful to station management, program directors and advertising executives in the past, the question remains, "Is it enough?" The answer must obviously be negative, since program inception and production still is practiced on a somewhat arbitrary level. The relative success or failure of a program still cannot be predicted with certainty in its early stages and its ultimate fate is still dependent, in large part, on later, quantitative measures. Of course, it is clear that an absolute degree of certainty can never be achieved in the business of audience measurement, especially on a predictive basis. Yet, it also seems clear that modern technology and knowledge of human behavior can perhaps help broadcasters achieve a higher stage of predictability than is currently the case. As one observer suggests,

³⁹Information concerning audience characteristics supplied by each commercial rating service is discussed in Quall and Martin, pp. 45-47 and Summers, Journal of Broadcasting, V, No. 2 (Spring, 1961), pp. 150-160.

[U]ntil recently, broadcasters were content to settle for quantitative information, which comes down to a kind of nose counting. . . . The time has come when the counting of noses will not provide the information that the broadcaster needs.⁴⁰

Rating Services: Criticism and Validity

The overriding criticism of television ratings concerns the emphasis which broadcasters place upon them for decision-making. This emphasis, critics suggest, is unwarranted, since they say ratings are treated as absolute figures rather than as educated guesses or ranges of audience reach. Low quantitative ratings usually result in an executive decision at either the network level for national programs or local level for community programs to alter the program in some way or cease production and airing of it altogether. The alteration may take the form of internal changes in the program such as personnel or concept changes. Or it may mean shifting the program to a different slot for competitive reasons. But, whether the executive decision favors a program or calls for its demise, the decision is almost always based upon the knowledge of viewer quantity or "how many" people are watching. As one critic observes, competitiveness resulted in a

⁴⁰Quall and Martin, p. 41.

. . . "battle of the ratings" from which the industry has never recovered. Decisions on the nature of programming began to be based not necessarily on whether a program was good but on whether it would be popular.⁴¹

An exception to the rule of rating dominance occurs when a particular advertiser wants to reach a so-called "target audience," i.e., an audience composed of a specific type of individual, homogeneous in age, sex, buying habits, interests, etc. In this situation, the broadcaster will retain the program if the advertiser believes it is worth the price of the air time to transmit his message to a small, but influential group. Golf tournament broadcasts, for example, reach comparatively small audiences, but advertisers perhaps are more certain than usual that the viewers are "there", elite and worth the price.⁴²

For the most part, each television season is characterized by the addition of new programs to the schedule in the fall, shifting of the time slots for some of these shows during the season and the presence of a so-called "second season" in which programs which earned low quantitative ratings are themselves replaced by new shows. The highly-touted "Beacon Hill" series on CBS which premiered at the end of August, 1975 and which was expected

⁴¹Quall and Martin, p. 41.

⁴²"TV Ratings: What They Are, How They Work," Changing Times, March, 1972, p. 39.

to be a success by critics and producers alike, was removed from the schedule early in November of the same year. The reason given for the cancellation was because it had " . . . failed to win even minimally adequate audiences during its two months on the air."⁴³ Simultaneously, the network also announced that it was cancelling "Three for the Road," ostensibly for the same reason.

The two cancellations raised to eight the number of series, all new, that have fallen under the C-B-S or N-B-C ax since the fall T-V season began last September eighth.⁴⁴

Headlines in various trade journals such as Broadcasting constantly emphasize the importance of ratings in significant programming decisions. "NBC Drops Off in Ratings after World Series; CBS Confirms Schedule Switches" is a prime example of such emphasis.⁴⁵ In fact, ABC relied so heavily on the ratings for its early morning news-entertainment offering, AM America, in 1975, that its weak showing, in comparison to the NBC and CBS competition in the same time slot, caused it to completely restructure the program. This action was taken after the initial concept of AM America was derived from supposedly lengthy and thorough audience analysis. The revised format,

⁴³Associated Press, October 25, 1975, 11:02 P.M., CST.

⁴⁴Associated Press, October 25, 1975, 11:02 P.M., CST.

⁴⁵Broadcasting, November 10, 1975, p. 40.

entitled, Good Morning America, features a new name, a new program host as well as new features and an entirely new approach.⁴⁶

Television news programs are also affected by the ratings procedure, although it is rare that a station will disband its entire news operation. Instead, low or inadequate ratings on a quantitative competitive basis will result in hiring and firing of personnel and changes in basic format structure. ABC recently took such action in an effort to compete more effectively with the CBS and NBC late afternoon news. One of the show's co-anchormen, Howard K. Smith, was assigned to the role of editorial commentator, leaving Harry Reasoner as ABC's single anchorman. Later, Barbara Walters was hired from NBC to share the co-anchor with Reasoner. The program's format was also altered, adding new undated features which the producers say are more relevant to the viewers. Again, this important decision was initiated by low ratings which placed the ABC news in third place, behind its two competitors.

Since the present system of determining television news programming does, in fact, stress to such a high degree the importance of the rating, then the validity of procedures which firms use to derive the ratings must

⁴⁶"ABC to Try Again in Early Morning," Broadcasting, October 20, 1975.

be scrutinized. This is exactly what happened in 1963 when the television rating system came under heavy fire during congressional hearings and which resulted in the publication of the Madow Report which identified weaknesses in ratings techniques.⁴⁷ Criticism had been leveled at the small size of the samples which services used to derive their ratings, at the inaccuracy and incompleteness of the ratings reporting, at the fact that viewing panels had been used as respondents in experiments even after they had been participating for years, at the exclusion of the Mountain Time Zone from some samples, at improper field work and faulty editing and weighting procedures.⁴⁸

The special congressional investigation concerned itself with answering two primary questions: (1) "Do rating services actually do what they purport to do?" and (2) "What is the function and usage of rating services in programming and sales decisions by broadcasters and advertisers?" In its report, the special subcommittee of the House Committee on Interstate and Foreign Commerce, indicated that the answer to the first question was an almost unequivocal "no," while the answer to the second inquiry questioned the ethical use

⁴⁷Madow Report, 87th Cong., 1st Sess., 1961, H. Rept. 193.

⁴⁸Changing Times, March, 1972, p. 40.

of ratings and suggested their role was much more profound in decision-making than either broadcasters or advertisers would admit.⁴⁹ This latter finding, incidentally, supports a similar conclusion found in the 1946 Federal Communications Commission Report, Public Service Responsibility of Broadcast Licensees,⁵⁰ and reinforced later by Skornia.⁵¹

As a consequence of the 1963-1964 congressional investigations of rating services, the three major television networks--the American Broadcasting Company, the Columbia Broadcasting System and the National Broadcasting Company--together with the National Association of Broadcasters, formed the Committee on Nationwide Television Audience Measurement (CONTAM). Its purpose was to pursue a ". . . rigorous investigation of the accuracy of network television audience size measurements."⁵²

⁴⁹Finney, Educational Broadcasting Review, II (February, 1968), p. 27.

⁵⁰Finney, Educational Broadcasting Review, II (February, 1968), p. 27.

⁵¹Harry J. Skornia, Television and Society: An Inquest and Agenda for Improvement (New York: McGraw-Hill Book Company, 1965). p. 122.

⁵²Committee on Nationwide Television Audience Measurements, How Good are Television Ratings? (continued . . .), A Report Prepared by Statistical Research, Inc. and presented at the Advertising Research Foundation Annual Conference on October 14, 1969. Copies available from Television Information Office, 745 5th Ave., N.Y., N.Y. 10022. Quoted from special cover attachment.

The study was conducted by Statistical Research, Incorporated, and the results presented at the Advertising Research Foundation Annual Conference on October 14, 1969. The Committee used sixteen thousand sample respondents for one part of the study and a ninety-four thousand respondent interview schedule for another section.⁵³

In essence, the CONTAM study confirmed the validity of rating service methodology. The study found that the diary method of the American Research Bureau and the Audimeter technique used by A. C. Nielsen produced "remarkably similar" results. The study also confirmed that random sample procedures are effective in measuring television viewing.

Sampling theory does indeed apply to measurements of television audience size. That is to say, estimates of television audience size obtained from well-drawn samples are unbiased and tend to fall reasonably close to the results obtained from census counts.⁵⁴

⁵³Martin Mayer, How Good are Television Ratings? A Report on the Findings of the Committee on Nationwide Television Audience Measurements (Television Information Office, N.Y., N.Y., 1966), pp. 9-10 and 16; and reprinted in Lichty and Ripley, pp. V-190--V-201.

⁵⁴"Ratings Found 99 and 99/100% Pure," Broadcasting, February 7, 1966, p. 52 and summarized in William H. Nattin, III, "An Analysis of Characteristics and Preferences of Daytime Television Viewers of the Middle to Upper Middle Income Group in Two Areas of Baton Rouge, Louisiana" (unpublished Master's thesis, The School of Journalism, Louisiana State University, 1966), p. 13.

The study also found that respondents who willingly cooperate with a rating service are likely to watch more television than so-called noncooperators, although the difference between the two groups was not great enough to affect the ratings appreciably. Finally, the study disclosed that cooperators tend to be younger and better educated than noncooperators, and to have larger families than other people. It is interesting to note that the Committee, upon completion of its lengthy and thorough investigation, concluded that "Ratings are an aid to decision-making, not goals in themselves."⁵⁵

Like CONTAM, another research effort which was spawned from the congressional investigation and which was directed toward evaluating current broadcast rating methodologies as well as developing new ones was the All Radio Methodology Study (ARMS). Organized jointly by the National Association of Broadcasters and the Radio Advertising Bureau in 1963, ARMS specified the principal objective of the study:

. . . to evaluate, on the basis of actual performance in a test market situation, whatever methods of measuring the radio audience appeared capable of meeting the information needs of advertisers and the broadcasting industry.⁵⁶

⁵⁵Quoted in Quall and Martin, p. 48.

⁵⁶Audit and Surveys, Inc., All Radio Methodology Study, Vol. I, September, 1966. P. I-1; and quoted in Finney, Educational Broadcasting Review, II (February, 1968), p. 28.

The ARMS study confined itself to analysis of the effectiveness of only those methods which are used to measure a listener's physical exposure to radio, i.e., a quantitative approach. Employing an elaborate schema for such an analysis, the general conclusions of ARMS were twofold: (1) the various diary and recall methods used by the rating services produce a wide variation in results, with the single media diaries seemingly more accurate than the multi-media diaries; and (2) of the eleven techniques tested, the personally-placed and picked-up, "radio-only" diary and the yesterday personal recall method appeared to be the most accurate.⁵⁷

The results of the ARMS project, then, reported in the spring of 1966, clearly suggested the modification of the then-current radio measurement procedures. It has since resulted in the American Research Bureau's implementing a radio-only and television-only diary procedure in place of its multi-media diaries. The report also concluded that the ARMS project was successful because it demonstrated the measurability of radio as well as the practicality of measuring the strengths and weaknesses of measurement techniques.⁵⁸

⁵⁷Audit and Surveys, Inc., Vol. 1, September, 1966, p. II-1; and quoted in Finney, Educational Broadcasting Review, II (February, 1968), p. 29.

⁵⁸Finney, Educational Broadcasting Review, II (February, 1968), p. 29.

The third self regulatory effort resulting from the congressional investigation of television ratings was the Committee on Local Television Audience Measurements (COLTAM), which has since been renamed COLTRAM, for Committee on Local Television and Radio Audience Measurements. Initially, it was concerned with three problem areas, (1) the statistical comparability of ARB and Nielsen local service ratings; (2) the differences between various diary-keeping methods; and (3) the effect of "cooperator" versus "non-cooperator" bias on rating results. In essence, COLTRAM's findings in each of these areas tend to confirm similar results obtained by the ARMS and CONTAM studies.⁵⁹

In spite of the encouraging results obtained by the three industry self-regulatory studies, the role and usage of ratings in decision-making remains relatively ignored. Do rating methodologies, which simply measure "sets-in-use," regardless of how refined and sophisticated such procedures may become, provide sufficient data to warrant the broadcasters' and advertisers' strong dependence on them for decision-making? It is the position of the current author that they do not. Quanti-

⁵⁹H.R. Rep. No. 1212, 89th Cong., 2nd Sess., 13 (1966), citing Hearing before the Special Subcommittee on Investigations of the House Committee on Interstate and Foreign Commerce on Broadcast Ratings, 88th Cong., 2nd Sess. (1964).

tative ratings reveal nothing about program quality and little about audience composition beyond simple demographics. If the broadcaster is fully to meet the FCC public service requirements and advertisers wisely spend their advertising dollar, it is imperative that decisions be made on the best information possible. This includes qualitative as well as quantitative data. Further, qualitative information can provide insight into the interests and needs of the non-viewer as well. Fairfax Cone, Chairman of the Executive Committee of Foster, Cone and Belding, an advertising agency, stressed this point:

Peak-time viewing turns up about sixty percent of U.S. television sets. . . . I believe there is a compensating factor in the forty per cent of families who are not tuned in to any station during the nighttime period . . . let us consider that here, every night, in a group of men and women not usually attracted by formula television, but certainly important to the success of any large sales objective.⁶⁰

Such qualitative information, too, about the nature of an intended viewing audience would help the educational broadcaster adapt programs which currently attract a comparatively small share of the viewers. It is not only important to a sales campaign, as Cone suggested but to the success of any worthwhile program offering as well. As Finney suggested:

⁶⁰Fairfax M. Cone, "What's Bad for TV is Worse for Advertising," Fortune, July, 1965, p. 254.

What is required for both commercial and educational broadcasting is the development of new methodologies which can predict in advance the interests and tastes of various segments of the public, thus giving some indication of the probable success a program will receive in a market, whether it be local or national.⁶¹

The Deductive Approach to Audience Measurement

It is posited herein that research tools have been developed that can enable the broadcaster and advertiser to understand better the nature of the intended audience by understanding its composition, together with its size. As Quall suggests,

Size of audience, while useful, if taken as the sole criterion for judging a station's value to the advertiser or its popularity with audiences, can lead to deceptive conclusions. The local manager needs additional "qualitative" information to supplement the findings of outside services.⁶²

He continues,

The composition of the audiences should be of far greater import than the total size of those audiences.⁶³

This, then, is the fundamental purpose of the present study. It will employ a procedure that will identify certain information regarding audience composition, both on an individual level and on a group level. Secondly,

⁶¹Finney, Educational Broadcasting Review, II (February, 1968), p. 34.

⁶²Quall and Martin, p. 40.

⁶³Quall and Martin, p. 49.

the resulting information can be used in an advantageous manner by the broadcasters in the Baton Rouge market area, to whom the data will be relevant. But it should also be noted that the procedure employed in the current study can transcend the local market area in which it is here applied and be of general use in other market areas as well.

One way of approaching the problem of prediction is to investigate more thoroughly than in the past the composition of television audiences, i.e., to learn exactly "who is out there" by identifying audience segments which hold similar images for station programming, in this case, television news image. Several studies have been performed to measure television station images; these are discussed in chapter two. But in each case, the studies concerned themselves with the images of real, on-the-air stations. This approach limits one's knowledge of television news image to those stations which already exist.

Since the number of television stations is increasing and with it, the number of television news operations and formats, it would be helpful to learn of possible news images for programming which does not yet exist. Moreover, there seems to be a growing dissatisfaction with existing television stations as evidenced by the increase in license challenges by special interest and minority groups. A study of television new image,

then, would be most useful if it could describe what viewers think of the status quo, i.e., what viewers think of existing news formats. It would also be helpful to learn how viewers perceive an "average" news operation and an "ideal" news format. The ideal model of inquiry has been used only to a limited extent in communications research.⁶⁴

Consequently, the following questions are formulated with regard to the present study:

1. What are the existing images of the television news operations of the three commercial Baton Rouge stations?
2. What are the viewers' images of "average television news operations?"
3. What are the viewers' images of "ideal" television news operations?
4. How are the three commercial Baton Rouge news operations correlated with hypothesized "average" and "ideal" television news operations?
5. What are the descriptive characteristics of each of the respondents who are discovered to characterize a particular image category?

⁶⁴See, for example, Robert Monaghan and Campbell B. Titchner, "EBR Readership Profile Analysis," Educational Broadcasting Review, III (June, 1969, pp. 31-42; Mervin D. Lynch and Leonard H. Sassewraith, "Dimensions of Personality Association of Network Newscasters," Journal of Broadcasting, X (Winter, 1965-66), pp. 33-43; and Jeffrey N. Simon, "Viewer Types and Viewer Preferences for Kinds of Television Violence," (unpublished Master's thesis, Department of Communications and Behavioral Sciences, The Ohio State University, 1969).

The study will proceed with an operational definition of "image" as advanced by Clevinger:

The IMAGE of a thing is the complex of associations that it arouses within an individual. An image exists within the mind of a given individual . . .⁶⁵

and commented upon by Kelley:

This (station image) is a very intangible factor but it may be of some importance. A good station image evokes more confidence with the viewers; this leads to more psychological impact and believability for the commercials aired by the station, and therefore may justify charging a somewhat higher rate. The difficulty in establishing the validity of such an image is great, however, and media buyers often discount heavily such claims made for stations by salesmen or station representatives.⁶⁶

It is the intention of this study, combined with others investigating station images, cited in the following chapter, to demonstrate a procedure for establishing the validity of these viewer perceptions. As a consequence, media buyers and others to whom such a procedure would be significant would be more prone to place a high value on its results and thus eliminate the hesitancy which Kelley expresses in the latter part of the above statement.

⁶⁵Theodore Clevenger, Jr., Audience Analysis (Indianapolis: Bobbs-Merrill Company, Inc., 1966), p. 83.

⁶⁶William T. Kelley, "How Television Stations Price Their Service," Journal of Broadcasting, Vol. XI, No. 4 (Fall, 1967), p. 318.

CHAPTER II

"Q" AND ITS APPLICATIONS

The Theory of William Stephenson

In order to answer the questions set forth on page 45 of the preceding chapter, it seems best to use some kind of psychological instrument, rather than a sociological survey. This is true primarily because the previous questions do not make reference to the proportion of viewers who have varied images of the stations' news programming. They ask only what elements are important to the audience, not how many people describe a certain station's news in the same way.

William Stephenson has developed a methodology, called "Q" methodology, which has several advantages particularly desirable for this study. In essence, this procedure, which may simply be termed "Q," is a kind of analysis which is designed primarily to discover "intra-individual significances" rather than "individual differences." Using Q, it is possible to discover what is important to the individual, without having to measure these traits in terms of other individuals. It is a methodology which is particularly appropriate when we are searching for the meaning of something (in this

case, a television news operation) to someone (a member of a station's audience).

Another characteristic of Q is that it allows an approach to a problem based on a theory, while, simultaneously, leaving open the possibility of discovering new factors unaccounted for in the original theory. A theory may be included in a structured Q sort, and yet when it comes time to analyze the data, it is possible that the data do not fit the theory and roads may be opened to revision.

Perhaps a rather basic use of Q as Schlinger employed it in the area of advertising will help clarify this technique at the outset.¹ The problem was to determine advertising themes for a new soft drink product which would appeal to specific, intended consumer segments. Forty-six potential advertising themes were selected from a universe of about 200 themes collected from a large assortment of soft drink print advertisements. These were chosen on the basis of balanced themes, such as rational appeals, sensory appeals, social appeals and ego-enhancing appeals. The themes were administered to a group of twenty-two students from various grade levels. They were requested first to place them in three categories: interesting, uninter-

¹Mary Jane Schlinger, "Cues on Q-Technique," Journal of Advertising Research, Vol. 9 No. 3 (1969), pp. 55-58.

esting and neutral. Following this, they were asked further to discriminate the themes into piles on an eleven point continuum, from "most interesting" to "least interesting." The distribution assumed the form of a quasi-normal curve, on a forced choice basis, with the larger number of themes placed in the center of the continuum and fewer themes placed at either end. These choices were recorded and, as a final task, the respondent was asked the reasons for placing certain themes at either extreme of the curve. This information was later used to provide insight into the meaning of the respondent's Q-sort.

The twenty-two individual Q-sorts were then treated to statistical correlation and factor analysis techniques to discover patterns of relationships among respondents. The resulting factors showed respondents whose Q-sort decisions corresponded to some degree, indicating similarity in attitude. In Schlinger's study, three significant factors were found, after establishing statistical criterion cut-off points for the correlations. Such a decision-making procedure is described in detail later in the present study as is the formation of factor scores and factor arrays to interpret properly the factor natures and compositions.

In essence, six respondents were found to represent the first factor, three respondents the second factor and five respondents the third factor. Since the

first factor proved to be the strongest, i.e., it carried the highest predictive value, its nature will be discussed at this time.

Schlinger labeled this consumer group segment the "Quick-Energy" type. It was composed primarily of high school students who were especially interested in two kinds of advertising themes: those promising energy and those mentioning food. Examples of such themes were "Lifts your spirits," and ". . . gives you the lift that turns you on, quick!" Food reference themes included such instances as "Makes good food even taste better" and "Makes the best soft drink-ice cream combination of all." During the interview situation, these respondents added that a soft drink would be most enjoyable after "vigorous, active work or play." This group tended to reject diet or low-calorie appeals. Schlinger concluded that this group of potential consumers, as represented by the first statistical factor which was discovered in the study, is composed of typical high school students or individuals with this kind of life-style orientation. She suggested that soft-drink manufacturers who wish to reach this type of consumer employ the quick-energy appeal in their advertising.

Q methodology, then, seems an appropriate method to employ in answering the questions set forth in this study. The remainder of this section will attempt to clarify some of the important concepts of Q first synthe-

sized in Dr. Stephenson's definitive exposition of this procedure, The Study of Behavior: Q-Technique and its Methodology.²

Q methodology is a procedure which combines the insights of psychology and psychometrics into a method of studying the process of communication and its effects. As such, it provides a research tool for examination of a wide-ranging series of hypotheses concerning human behavior, from the early study of values as testable propositions,³ to more recent applications in education⁴ and, of course, television.⁵

All such studies, as is Q itself, are based on two fundamental premises: (1) that it is human behavior, in both its objective, observable mode and subjective, covert mode, that is the subject of investigation; and (2) Q methodology provides the necessary principles and

²William Stephenson, The Study of Behavior: Q-Technique and its Methodology (Chicago: The University of Chicago Press, 1953).

³See, for example, G. W. Allport, P. E. Vernon and G. Lindzey, Study of Values (rev. ed.; Boston: Houghton Mifflin, 1951).

⁴See, for example, F. N. Kerlinger, "Progressivism nad Traditionalism: Basic Factors of Educational Attitudes," Journal of Social Psychology, 58 (1958), pp. 111-135; and T. Mori, "Structure of Motivations for Becoming a Teacher," Journal of Educational Psychology, 56 (1965), pp. 175-183.

operations for such studies.⁶ Perhaps this can be expressed more succinctly in Stephenson's own words when he suggests in a well-deserved, but somewhat immodest tone:

. . . the science of behavior can be immeasurably improved by attending to a few principles upon which we have based the method now well known as "Q-technique".⁷

Wittenborn⁸ has condensed Stephenson's detailed view of Q methodology into these six generalized points:

1. Q method (requires) ipsative (instead of normative) variables, particularly Q sorts.
2. Q method lends itself to correlations between people or between different conditions for the same person.
3. Q method requires a conceptually structured set of statements in order to interpret the correlations between people--each set of statements comprising systematic combinations of different levels of the various hypothetical effects.
4. Q method permits a study of a person by means of analysis of variance of the statements, assuming that the sorted statements were initially structured as replications of the possible combinations of a priori effects and levels of reaction.

⁶The following discussion is based, in part, on Fred N. Kerlinger, "Q Methodology in Behavioral Research," Science, Psychology, and Communication: Essays Honoring William Stephenson, ed. Steven R. Brown and Donald J. Brenner (New York: Teachers College Press, 1972), I, pp. 3-35.

⁷Stephenson, p. 1.

⁸J. R. Wittenborn, "Contributions and Current Status of Q Methodology," Psychological Bulletin, Vol. 58, No. 2 (1961), p. 132.

5. Q method favors a dependency type emphasis in factor analyses with rotations determined by the nature of the propositions concerning the variables.
6. Q method leaves unanswered the question of the parent population from which the individual is drawn: the method examines singular propositions on the assumption that somewhere there are more people like the one under scrutiny.

In essence, by refining further the above observations, it can be concluded that Q consists of a set of procedures for classifying respondents into groups or types on the basis of their attitudes toward a subject under investigation.⁹ Its parameters include both a method for gathering data and a method of processing this data. In the first, the data are gathered not in the traditional way, i.e., by requesting a large number of respondents to respond to certain, specified stimuli which the experimenter provides. Rather, the data are provided by the respondents by requesting them to sort stimuli into a fixed distribution along a specific dimension, e.g., usually how relevant, interesting or pleasing they are. Q differs from the more traditional ways of processing attitude data because it employs a form of factor analysis which groups respondents into types on the basis of their attitudes.¹⁰

⁹Mary Jane Schlinger, "Cues on Q-Technique," Journal of Advertising Research, Vol. 9, No. 3 (1969), p. 53.

¹⁰Schlinger, Journal of Advertising Research, Vol. 9, No. 3 (1969), p. 53.

The advantages of this approach make Q especially useful for any type of research which requires data of an intensive, probing, qualitative nature. Obviously, it can provide insight into an entire range of respondent attitudes toward a subject, taking account of whatever associations, feelings, opinions, notations, perceptions, cognitions, etc., which an individual may hold for a criterion stimulus, e.g., in the study currently under investigation, this stimulus concerns television news images. Secondly, as mentioned above, Q can classify respondents into groups or types based upon similar profiles of response. Demographic variables can also provide such breakdowns to differentiate consumer groups. But Q does not depend on demographic variables for audience segmentation. Instead, people are grouped according to similarities and differences in their attitudes, needs, motives and wants. These are more personal characteristics of the individual than the somewhat more superficial demographic descriptions and are perhaps more indicative of the nature of a person or group than the less intimate demographic characteristics. Finally, Q is amenable to quantitative, statistical techniques. Q data are readily adaptable to correlation and factor

analysis to arrive at objectively and mathematically defined types of respondents.¹¹

The procedure employed in the present study is based upon the whole of Stephenson's methodology, of course. While it would not be practical, if indeed necessary, to summarize and comment upon each idea and concept which is advanced by Stephenson, it behooves the author to highlight some of the more important points so that the present study may be clarified. An interested reader, not already familiar with the Q approach, is urged to investigate the many writings by Stephenson and others on this subject which appear throughout this discussion.

The Difference Between R and Q

Stephenson first used the symbol "Q" to differentiate his technique from others in 1936:

I shall use Q as the sign for correlations between persons, so distinguishing them from correlations such as "r" between two tests.¹²

If this distinction were diagramed on a chart with the vertical axis described as "persons," and the horizontal

¹¹Schlinger, Journal of Advertising Research, Vol. 9, No. 3 (1969), pp. 53-54.

¹²William Stephenson, "The Inverted Factor Technique," British Journal of Psychology, 26 (1936), pp. 344-361; and quoted in O. Hobart Mowrer, Psychotherapy: Theory and Research (New York: The Ronald Press Company, 1953), p. 332.

axis described as "test results," then R technique would proceed to correlate the columns of results to arrive at individual differences based on the test results, while Q technique would correlate the rows of results to show relationships between the respondents themselves. R technique, then, depends upon the data elicited from large numbers of respondents and is quantitative in nature to the extent that test score performance yields individual difference results; the performance of a single respondent is of little or no interest when conclusions are drawn from R-derived data. On the other hand, factor analysis of data derived from the correlation of persons yields descriptive information based solely upon individual responses. As Stephenson comments on this distinction:

I have concluded that Q technique serves general and type psychology, just as r technique is for work on individual differences, and this dichotomy would seem to be a fundamental one.¹³

Structured Q Sorts and Theory

Perhaps the most important contribution of Q as a unique approach to behavior analysis is the opportunity to build a pre-determined theory or set of hypotheses into a Q instrument and then test those pre-conceived notions. Perhaps equally significant is the parallel

¹³William Stephenson, "The Inverted . . .," British Journal of Psychology, 26 (1936), pp. 344-361; and quoted in Mowrer, p. 334.

opportunity to discover aspects of the original theory of which the researcher may not have been aware or even to uncover an entirely new theory.

The really important idea, from both scientific and measurement viewpoints, is that of building theory into a measurement instrument and then systematically testing the theory not with a random sample of persons but with a sample (or samples) deliberately and systematically selected to test the theory.¹⁴

The persons selected as respondents will possess certain characteristics which are presumed to have some relevance to the hypothesized factors or types of individuals. In the present study on television news images, for instance, respondents were selected on the primary bases of socio-economic status, race and age with educational level and sex of the respondents included as secondary theoretical variables.

The Q sort instrument, if it is derived from the theory advanced initially, will be of the "structured" type, i.e., ". . . to structure a Q sort is virtually to build a 'theory' into it."¹⁵ Its opposite, an unstructured Q sort, consists of a set of items which comprise a single domain or category, but which are not otherwise

¹⁴Fred N. Kerlinger, "Q Methodology in Behavioral Research," Science, Psychology, and Communication: . . . Brown and Brenner, ed., p. 4.

¹⁵Fred N. Kerlinger, Foundations of Behavioral Research, (2nd ed.; New York: Holt, Rinehart and Winston, Inc., 1973), p. 588.

undifferentiated. These are like the items which comprise a personality or attitude scale; they presumably measure a single, broad variable.

The items of a structured Q sort are similar, in that they too are all in a single domain. These are partitioned in such a way that they reflect the singular propositions being tested.

Instead of constructing instruments to measure the characteristics of individuals, we construct them to embody or epitomize 'theories.' In the use of Q . . . individuals as such are not tested; theoretical propositions are tested. . . . the basic rationale of Q . . . is that we have individuals sort the cards not so much to test the individuals as to test 'theories' that have been built into the cards.¹⁶

Structured Q sorts can be of two kinds: a one-way design or a factorial design. In the first, which the present study employs, a theory is broken down into its representative categories and each category is expressed in two partitions, e.g., aesthetic form = regular and irregular. The factorial design is technically more complex and is appropriate for extremely broad theories. Here, instead of two partitions, each category is divided into cross-partitions. The more complex the factorial design of the Q sort, the larger the number of statements

¹⁶Kerlinger, Foundations of . . ., p. 588.

that are required. One author suggests that factorial designs which require more than one hundred statements in the Q sort be avoided.¹⁷

Factor Analysis and Factor Arrays

In Q, the variables are the respondents, since it is persons that are correlated rather than test results as in R methodology. Consequently, the factor analysis will show patterns of relationships among the respondents. Each individual factor is composed of respondents who provided Q sorts which corresponded in some degree to each other, i.e., respondents who tended to evaluate and sort the Q items in a similar way, thus indicating some similarity in attitude.

Conceive factors as similar clusters of objects--in this case persons, or rather, the responses of persons. Those individuals who respond to a Q sort similarly will form clusters of persons.¹⁸

The process of rotating factor loadings is a statistical procedure which indicates the relationship of each respondent to every factor. These loadings may range (as with correlation coefficients) from +1.00 to -1.00, with the higher a respondent's loading in either direction indicative of how representative he is of that

¹⁷Fred N. Kerlinger, "Q Methodology in Behavioral Research," Science, Psychology, and Communication: . . . Brown and Brenner, ed., p. 11.

¹⁸Kerlinger, Foundations of . . . , p. 592.

particular factor dimension. A weak loading which approaches .00 may be interpreted as reflecting a low degree of communality between the respondent and the factor, or the weak loading may be due to error. In either event, a weak loading will exclude a particular respondent from identification with a corresponding factor.¹⁹

Once the factors in a particular study are known, the calculation of factor arrays serves as a scientific and useful procedure to determine the Q sort items which are most associated with a particular factor.²⁰ The weighted averages of the responses of the individuals who substantially loaded on a factor are summed and then rank-ordered. The result is a "synthetic" Q sort, a literal description of the factor which can be used for direct interpretation. Schlinger cautions against omitting the factor array, because it allows

. . . the researcher to look at the patterns and interrelationships between items that are accepted and rejected by each factor group, thus adding cohesiveness and depth to the interpretation.²¹

The factors and factor arrays which were derived from the

¹⁹Schlinger, Journal of Advertising Research, Vol. 9, No. 3 (1969), p. 56.

²⁰A detailed discussion of this procedure is found in Stephenson, The Study of Behavior: . . ., pp. 176-179.

²¹Schlinger, Journal of Advertising Research, Vol. 9, No. 3 (1969), p. 59.

present study are presented and discussed in detail in Chapters IV and V.

Major Limitations of Q

The foregoing discussion of Q methodology has highlighted its nature and some major characteristics. It was also suggested that the main strength of Q is its close affinity to theory, i.e., of building a set of hypotheses into a scientific instrument by relating theoretical variables to each other in a logical and empirical fashion. Q methodology, then, is largely a creative, technical instrument which has the potential of producing fruitful and rewarding behavioral data.

Unfortunately, Q does not represent the ultimate achievement in behavioral analysis; disadvantages do accompany its advantages. Sampling and statistical procedures are the two limitations perhaps mentioned most frequently by critics.

Q has been a small sample research procedure because it is simply not suited to large samples as is R methodology. While it is possible to administer Q sorts to large and presumably representative samples, most computers do not possess the capacity to factor data from more than two hundred respondents in a single matrix.²² Therefore, using Q alone, it is not possible to generalize

²²Schlinger, Journal of Advertising Research, Vol. 9, No. 3 (1969), p. 59.

to larger populations of individuals; if projections are essential, then large sample, normative supplementation of Q, such as survey techniques, is necessary.²³ Stephenson's conception of Q recognizes this inherent limitation, but it is not considered a weakness. Q is designed to test not persons, but theory or hypothetical notions. In a relatively recent work, Stephenson bluntly says that he is not concerned about R methodology and the comparison of Q to R; each is a separate procedure, designed to accomplish unique objectives. With Q,

We shall measure subjectivity and deal with subjective operations (Q-sorts) with all the rigor of science, using statistical and experimental methods to suit our needs.²⁴

The underlying assumption of a small sample Q study is that major factors or attitudinal groups would be found again if

²³Two procedures have been suggested to compensate for this criticism of Q. Cohen suggests a method for using Q with samples of up to two thousand respondents in Jacob Cohen, "A Method of Market Segmentation Based on Multivariate Analysis of Attitude Data," Paper presented at the First Annual Computer Conference, sponsored by Pace College and the New York Chapter of the American Statistical Association, New York, New York, December, 1966. And Monaghan, et. al., have reportedly devised a similar procedure called the Branch Correlation Audience Indicator, described in Erickson, David L., Monaghan, Robert R., Shew, Richard L. and Groves, David L., "Progress In the Development of Branch Correlation Technique," Instructional Psychology, Vol. 3, No. 1 (Winter, 1975), pp. 35-38.

²⁴William Stephenson, The Play Theory of Mass Communication (Chicago: The University of Chicago Press, 1967), p. 11.

the study were repeated using the same structured sample of respondents. Of course it is possible that additional attitudinal segments would be discovered, but at least the initial findings would remain constant.

Another criticism of Stephenson's exposition and use of Q methodology is statistical in nature. Most statistical tests of the R type assume independence, that is, the response to one item stimulus should not be affected by the responses to other items. For example, if a respondent is presented with items from a summated-rating scale, such as a Likert type, the subject can respond to each of them independently; there is nothing which forces the response to one item to affect responses to other items on the scale. This is not necessarily true in Q sorting, however. Strictly speaking, each time a respondent places a card somewhere along the forced-choice continuum, it affects the placement of the other stimuli in the set to be sorted. Consequently, when an analysis of variance test is applied to the data, the researcher does not actually have the degrees of freedom with which to work that are found in the analysis of variance table. In the present study, for example, with a fifty-six item, factorial Q sort, the total degrees of freedom are supposed to be fifty-five. But this is not really the case; there is some lesser, unknown number which adulterates the test of significance to some unknown degree.

In spite of this difficulty, it seems that the correlation and analysis of variance procedures which Q employs are not invalidated. For the fact of the matter is that with a Q sort of a sufficiently large quantity of items, the number of possible ranking combinations is enormous. There are over three and a half million, for instance, in a rank-order scale of only ten items; at 56! (factorial) in the present study, the number of possible combinations is staggering. But in order to compensate for this potential shortcoming, it might be advisable to raise the requirements for statistical significance. Instead of setting a criterion of .05 in Q sorts, the .01 level of significance may be employed before concrete conclusions are drawn. The present author added another precautionary measure in this context. The subjects were especially instructed that they could always move the cards from one pile to another as frequently as they desired until they were satisfied with their decisions.

A final criticism which is leveled at Q, mostly by traditional, R-oriented observers, concerns its forced-choice procedure. Critics suggest this is an undue constraint on the respondent which does not allow a true, subjective opinion to be expressed. Some subjects, including those in the present study, have also been found to complain about the forced-choice constraint of Q sorts. The degree of validity of this argument is still unknown. Block found forced procedures equal to or superior to

unforced techniques.²⁵ Jones found the forced procedure inadequate.²⁶ If opinion is to be the determining guideline, then the author draws upon the advice of Kerlinger:

. . . for its purpose the forced sorting procedure is a useful device. . . . The important thing is to force individuals to make discriminations that they often will not make unless required to do so.²⁷

Q in Perspective

It appears that William Stephenson has provided the behavioral sciences with a theory and a corresponding procedure which is useful in those instances where an intensive exploration of the individual is appropriate. Q is not designed to replace normative methodologies, but rather to serve as an alternative. A researcher can test theories on small numbers of individuals, carefully selected for their known characteristics. In this way, unknown or unfamiliar areas of inner human behavior which remain out of reach and inaccessible to traditional procedures, can be identified, their variables intercorrelated and explored for their functioning. As Kerlinger suggests:

²⁵J. Block, "A Comparison of Forced and Unforced Q-Sorting Procedures," Educational and Psychological Measurement, XVI (1956), pp. 481-493.

²⁶A. Jones, "Distribution of Traits in Current Q-Sort Methodology," Journal of Abnormal and Social Psychology, LIII (1956), pp. 90-95.

²⁷Kerlinger, Foundations of . . ., p. 596.

Clearly, Q methodology is not a be-all and end-all of behavioral research. But it has a valuable contribution to make.²⁸

For this study, this contribution concerns investigating viewer perceptions of television newscasts and the nature of these "image groups." This information should reflect the needs and desires, and the likes and dislikes that guide a viewer in deciding whether or not to watch a television news program and, if so, which one. For these objectives, Stephenson's Q seems especially suitable.

Contributory Articles and Studies

If the amount of experimental research and theoretical essays available in a given field of study are an indication of the amount of attention that subject has received, then qualitative audience research has not received a great deal of emphasis. It is true that there have been several studies performed which sought to identify possible television variables which produced positive or negative impacts on the viewers, but these were also basically quantitative in nature. Instances of this type of approach include such investigations as identifying factors which influence the appeal of tele-

²⁸Fred N. Kerlinger, "Q Methodology in Behavioral Research," Science, Psychology, and Communication: . . . Brown and Brenner, ed., pp. 34-35.

vision news personalities.²⁹ Still others have delved into the problem of identifying and isolating television news program elements, excluding personalities, which appeal to viewers.³⁰ Shosteck recently found four non-personality factors of television news which lead to increased viewing. These were (1) high use of film or tape footage; (2) focus on people in the news rather than the newscaster; (3) use of fewer, longer stories, rather than many brief ones; and (4) proximity of story locale to the area of residence of the viewer. Steiner conducted one of the most complete studies on television audiences in 1963,³¹ updated ten years later by Bower,³² and three studies of electronic media audiences have been conducted at Louisiana State University on the Baton Rouge campus to date: a television study in rural Louisiana in

²⁹Herschel Shosteck, "Factors Influencing Appeal of TV News Personalities," Journal of Broadcasting, XVIII (Winter, 1974), pp. 63-71.

³⁰Herschel Shosteck, "Want Some Specific Ideas on Improving Your Local TV News Coverage?", Strauss Editor's Reports, No. 78 (January 11, 1971).

³¹Gary A. Steiner, The People Look at TV (New York: Alfred A. Knopf, Inc., 1963).

³²Robert T. Bower, Television and the Public (New York: Holt, Rinehart and Winston, Inc., 1973).

1958³³ and a radio study of rural Louisiana in 1949.³⁴ Later, Nattin conducted an analysis of daytime television viewers in the middle to upper middle income group in Baton Rouge and compared his results to established quantitative rating firms.³⁵

However, it was the work being done at The Ohio State University in the late 1960's that was representative of solid qualitative audience research. In the third part of an Educational Broadcasting Review series (the first two of which are discussed in Chapter One), Joseph T. Plummer methodically traced a program idea from its inception through telecast.³⁶

Beginning with the premise that program development is risky because many which are produced either fail before they get on the air because they cannot be sold or fail after they get on the air because of lack of viewer

³³Alvin L. Bertrand and Frederick L. Bates, Television in Rural Louisiana, Louisiana Agricultural Experiment Station Bulletin 518, December, 1958.

³⁴Alvin L. Bertrand and Homer L. Hitt, Radio Habits in Rural Louisiana, Louisiana Agricultural Experiment Station Bulletin 440, September, 1949.

³⁵Nathan H. Nattin, III, "An Analysis of Characteristics and Preferences of Daytime Television Viewers of the Middle to Upper Middle Income Group in Two Areas of Baton Rouge, Louisiana" (unpublished Master's thesis, The School of Journalism, Louisiana State University, 1966).

³⁶Joseph T. Plummer, "Audience Research in Television Program Development," Educational Broadcasting Review, Vol. 2, No. 3 (June, 1968), pp. 23-30.

acceptance, Plummer sought to employ "Q" in order to minimize the rate of program attrition. He worked in conjunction with producers in developing an entirely new television program, designed to appeal to a proposed target audience. In essence, the technique involved approaching potential viewers and experimentally eliciting from them decision-making criteria which they use in selecting viewing stimuli and cognitive and emotional reactions to a proposed program concept. This data was obtained prior to the actual inception and production of the program. Using Q and multivariate analysis, i.e., a form of factor analysis which is used for putting experimental propositions to test,³⁷ six major phases of the experimental design were formulated. These are discussed below.

The first step of Plummer's study was designed to gain insights into the acceptability of the basic idea for the new program series. That is, the researchers wanted to learn how potential viewers reacted to a program concept which was designed to include a panel of persons discussing some contemporary art form via The Ohio State University's educational television outlet, WOSU. Approximately seventy-five per cent known station viewers and twenty-five per cent unknown quantities were contacted initially by telephone and asked to respond to a structured

³⁷Stephenson, The Study of Behavior: . . . , p. 33.

interview situation. Generally, eighty-three per cent of the telephone respondents indicated a favorable orientation toward the program idea and five preliminary recommendations were generated for the producer at this early stage of the research. They were: (1) the basic concept of the show should be retained; (2) negative reaction to the notion of "critical analysis" should be explored thoroughly; (3) the proposed variety of art form treatments may result in some viewers tuning in some programs and not others; (4) the series appears to fill an existing cultural gap in the community; and (5) the "live" presentation dimension of the program appeared to have particular appeal to the respondents.

Two alternative formats for the proposed series were then generated, the first based on the information generated in the initial interviews and the second generated by the producer and writer of the proposed program. Two sets each of thirty-six hypothetical program descriptions were then created from each format; each of these sorting decks was factorially generated from nine strong concepts found to be persistent across the two initial formats. Thirty-eight respondents were administered the two Q-sort decks of program descriptions, discriminating the statements along a quasi-normal curve with one end representing what the respondent would "most enjoy watching" to what the respondent would "least enjoy watching." Computer intercorrelations were then produced and the results factor

analyzed to produce three factors of hypothetical viewers for the proposed new program. These three factors were labeled "Mr. Problem-Solver," "Mrs. Art Buff" and "The Involvement Viewer," respectively. Each was given a description based upon the statement sortings of those respondents who statistically were included in each factor; demographic data and personality observations were also used for these descriptions. These three factors, together with six audience sets which emerged from the data analysis, i.e., each set represents a probability for a special target audience for the new series, were used to formulate seven additional recommendations to the shows' producers. These were more specific than the initial five recommendations and included: (1) the program should include excerpts or concrete examples of the art work under discussion; (2) there should be focus on the art work's impact on society; (3) there should be a pervading sense of the immediacy of the art work under discussion; (4) experts should contribute both facts and intuitive feelings about the art; (5) home viewers' responses should not be included; (6) there should be a creative interchange between the artist and experts from other fields; and (7) the program should encompass a half-hour time slot on Friday evenings at either 8:30 or 9:30.

Steps numbers three and four of Plummer's study were conducted simultaneously. Step number three was once again a focused interview procedure designed to generate a wide

range of possible treatments and executions for the proposed show. Step number four was oriented toward the same goal, but was more quantitative in nature. The producer, director and writer of the proposed show generated a series of statements concerning treatment and execution and differentiated them into three statement instruments. The first instrument was designed to investigate preference for treatment alternatives such as "Learn about the lives of the artists." The second instrument was designed to investigate viewer preferences for the kind of moderator or host the series should have. And the third instrument was an attitude scale instrument examining execution alternatives such as "formal or informal setting." Fourteen of the most representative respondents from the second step of the study, i.e., those who loaded highest on the factors and sets, were administered the three instruments and the data subjected to factor analysis. Four preference patterns evolved from the analysis resulting in eight specific recommendations to aid the producer in finalizing production and development decisions. These included: (1) the viewer should be given the feeling that he is being kept up to date on the world of contemporary art; (2) the program should challenge the viewer's interest in contemporary art; (3) some background of each artist should be presented on the program along with his works; (4) the most appropriate moderator for the show would be a man who, most importantly, would be able to ask perti-

ment and thought-provoking questions of the show's guests; (5) each program should include examples of the kind of art work under discussion strategically dispersed throughout the show; (6) the kind of people on the program should be recognized as experts in their field; (7) the nature of the program should be generally spontaneous; and (8) a semi-abstract setting for the show would be most appropriate.

The fifth step of the program generation was designed to test some of the conclusions drawn from the data thus far. The most representative respondents were asked to rank order descriptions of possible settings and titles. A content analysis indicated a strong preference for one of the proposed settings and a preference for one of the two proposed titles.

Finally, the last step of the procedure was designed to evaluate a pilot program of the series. Viewer reaction was researched in two ways: (1) the most representative viewers from previous research viewed the program in the studio with an in-depth discussion following; (2) the pilot program was aired and telephone interviews were conducted among a random sample of two-hundred respondents. Five final recommendations were then given the producer based on this data: (1) two major appeals should be provided the viewer, including an opportunity to learn about the art work under discussion and information as to how the art relates to the everyday world of the

viewer; (2) the panel composition should change from program to program; (3) the program needs to be more dynamic with more film, shots of the art objects, etc.; (4) the spontaneous approach should be retained, but with more interaction of the artist; and (5) the series has strong potential for success.

The findings of the Plummer research were generally favorable and the author concluded:

There is predictive validity in the research from step to step which can guide early development decision-making. The research approach is a meaningful contribution to help predict the performance of a new program or pilot when it becomes a regular series.³⁸

One phase of the present study will concern the identification of components of viewer preferences for a television news format, based upon the "ideal" factors generated from the Q study.

Plummer's study was apparently successful enough to convince the film-making studio, Metro-Goldwyn-Mayer, to invest in a similar study for the purpose of generating program ideas for possible television series. Thus it was that two of the contributors to the EBR series, discussed above, coordinated their efforts, with others, to develop new program concepts for MGM television based upon Q methodology. Again, using the rationale of minimizing program failure by studying the nature and characteristics

³⁸Plummer, Educational Broadcasting Review, Vol. 2, No. 3, (June, 1968), p. 30.

of potential viewers, the study employed a procedure similar to the one in the present study.³⁹

The authors employed what was termed a "New Program Concept" instrument which was designed to generate audience reaction to a number of content and style variables within television programs which did not then exist. The nature of the instrument itself was identical to the one developed in the Plummer study, cited above. The actual instrument used in the Monaghan, et. al. study was developed in two phases. First, television programs currently on the air were studied for their basic appeal elements which appeared to remain consistent across programs. Also, focused interviews were conducted with television viewers; the two procedures yielded four areas of appeal, which included ten major dimensions of television program preference. These are listed in Table I. This data were then used to construct the final Q instrument employed in the study. By combining the various appeal elements ac-

³⁹Robert R. Monaghan, Joseph T. Plummer, David L. Rarick and Dwight A. Williams, "Predicting Viewer Preference for New TV Program Concepts," Journal of Broadcasting, Vol. 18, No. 2 (Spring, 1974), pp. 131-142.

TABLE I
FACET ELEMENTS FOR PREDICTING VIEWER
PROGRAM PREFERENCE*

A. REALITY

- A₁ Factual - Informational
- A₂ Fictional - Representational
- A₃ Fictional - Nonrepresentational

B. VALUE

- B₁ Moral
- B₂ Moral - Sentimental
- B₃ In these programs moral issues are not considered.

C. COMPLEXITY

- C₁ High
- C₂ Low

D. SERIOUSNESS

- D₁ Comedy
- D₂ Noncomedy

* Reprinted from Robert R. Monaghan, Joseph T. Plummer, David L. Rarick and Dwight A. Williams, "Predicting Viewer Preference for New TV Program Concepts," Journal of Broadcasting, 18, (Spring, 1974), p. 135.

cording to Monaghan's balanced block design,⁴⁰ thirty-six hypothetical television programs were developed. This Q-sort statement deck was administered to sixty-four respondents from the community, with representatives based on sex, age and socio-economic status. The respondents were asked to discriminate the program choices along a quasi-normal Q-distribution, with nine forced-choice locations ranging from "most preferred" to "least preferred." The data were then intercorrelated on a person-to-person basis and the results factor-analyzed for significant statistical loadings. Factor arrays were then displayed to represent the best estimate of the rank order of programs for the type of viewer represented by the factor.

The study was successful in identifying two strong factors, representative of viewer types. The two types were mutually exclusive and did not overlap. They were titled "Mr. Happy World" and "Mr. Realistic Conflict," the titles and subsequent descriptions based upon the relative sortings of each type combined with demographic and personality information provided by the researchers. Since the two types were, in fact, mutually exclusive and did not overlap, the authors recommended to MGM-TV that two decidedly different program types be evolved. One

⁴⁰Robert R. Monaghan, "A Systematic Way of Being Creative," The Journal of Communication, 18 (March, 1968), pp. 47-56. Note: A discussion of this procedure and a modification used in the present study is found in Chapter III.

would appeal to the "Mr. Realistic Conflict" audience segment and contain elements closely related to the "real" world while avoiding fantastic themes. The "Mr. Happy World" audience segment would prefer programs containing elements of nostalgic human interest and light humor. Consequently, the authors conclude that several programs were developed for television based upon the appeal patterns identified by Monaghan, et. al, among them political, crime and lawyer dramas. The authors suggest that at least three, "The Bold Ones," "Columbo," and "Judd for the Defense," were direct results of the study discussed above and were eventually successful in the ratings. The results lend support to the validity of the use of "Q" and small sample research in audience analysis.

Simon used a similar procedure in investigating audience preference or non-preference for types of violence found in television programs.⁴¹ While the debate over whether the presence of television violence incites violent acts by viewers has been continuing for years and

⁴¹Jeffrey Neil Simon, "Viewer Types and Viewer Preferences for Kinds of Television Violence" (unpublished Master's thesis, Department of Communications and Behavioral Sciences, The Ohio State University, 1969).

still continues to rage,⁴² Simon used Q in investigating televised violence only as a viewer appeal, not in a cause-and-effect relationship. Using a total of thirty-four respondents, it was hypothesized that clusters of viewers exist with certain preferences or aversions for kinds of violence in television programs. Analysis of initial focused interviews produced eight types of violence which appear to have significance across viewers. These were Overt-Covert violence, violence in a Fiction or Non-Fiction context, Expected-Non-Expected violence and violence in which the "Villain Triumphs--Villain Loses." A total of fifty-six statements were then constructed using a variation of the balanced block design described in Chapter III of the present study. The statements each described an hypothetical program scene containing two of the types of violence mentioned above. The respondents were requested to indicate their relative preference for each statement along a nine-point continuum from "most not like to see" to "most would like to see." The results were then computer correlated and factor analyzed for those respondents whose rankings strongly correlated. The

⁴²The two extremes of the television violence issue are well-represented by Albert Bandura, "What TV Violence Can Do To Your Child," Look (October 22, 1963); and by Martin Maloney, "Television Violence is not Harmful," TV Guide (January 25, 1969). That the issue is still not resolved is reflected in the recent headline, "TV Violence Called Scandal," Baton Rouge Morning Advocate, December 9, 1975, p. 7-B.

Repertory Grid Technique⁴³ was also administered to each Q respondent and scatterplots were obtained for those respondents whose loadings were statistically strong on the resulting factors. The Grid was thus used as a device for interpreting the personality characteristics of the respondents to explain the factors better.⁴⁴ Conclusions were then formulated concerning the types of viewers with regard to similar preferences or non-preferences for the viewing of kinds of television violence. Three viewer types were thus identified and labeled: (1) The Pragmatic Viewer; (2) The Educated-Uninvolved Viewer; and (3) The Normative Viewer. With the addition of these findings to those isolated by Monaghan and Plummer, a composite picture of

⁴³In brief, the subjects were asked to choose twelve television programs with which they were familiar, and the data were recorded, one to an index card. The respondent was then shown randomized combinations of three of the shows and was asked to compare and contrast them. "Like I'd Like to See--Like I'd Not Like to See" was supplied by the experimenter as the twelfth dimension. Each of the twelve elements were then ranked by the respondent from the one most closely approximating the positive adjective previously generated to the one most closely approximating the Contrast adjective, also previously generated.

⁴⁴For a thorough discussion of the theory underlying the Repertory Grid Technique, see George A. Kelly, The Psychology of Personal Constructs (New York: W.W. Norton and Company, Inc., Vol. I, 1955); and George A. Kelly, A Theory of Personality: The Psychology of Personal Constructs (New York: W.W. Norton and Company, Inc., 1963). For a discussion of the actual Grid technique, see Robert R. Monaghan, Repertory Grid Method for Communication Research. Paper presented at the Annual Conference of the Speech Association of America, Chicago, Illinois, September 29, 1966.

potential audience groups begins to form. The present study seeks to provide additional knowledge in this direction.

One of the advantages of Q methodology is that it can be used to study potential viewer preferences of practically any dimension of television broadcasting as well as provide a framework for the conception of totally new program types. While some of the preceding studies were oriented towards conceiving new program types prior to their production, James Flynn approached the problem from a different angle. Rather than being concerned with viewer images of individual programs aired on a station, he used Q to generate the "ideal" television station.⁴⁵

Flynn proceeded on the premise that new television station facilities were quickly emerging and, coupled with the advent of Community Antenna Television or CATV and commercially feasible video cartridge systems, it was necessary to divide the audience into preference groups. Of course, Monaghan and Flynn, in studies designed to generate new program types as discussed above, followed this procedure as well. However, in this case, Q was used to isolate specialized audience sub-groups with the objective to then build a station geared toward the needs,

⁴⁵James H. Flynn, III, "The Ideal Television Station: A "Q" Study," Journal of Broadcasting, Vol. XVI, No. 1 (Winter, 1971-72).

wants and desires of each grouping.

Rather than aim for the mass of the "average viewing public," it would be more in the economic interests of a station if it decided to capture one particular group of people who have similar viewing and buying patterns, and sell advertising on that basis.⁴⁶

The author shares this philosophy as it is applicable to television news programming; a discussion of this approach is found in Chapter I.

Flynn used a series of focused interviews combined with material gathered from related studies to generate a Q sort instrument. Four concept elements were discovered to be consistent across viewers relating to station image and these were used to construct forty-eight statements using the balanced block design discussed above. The statements referred exclusively to a station's programming and were validated by a panel to verify that the statements in fact reflected the intended concept elements. Four out of five members of the panel were required to agree with the statement's construction for that statement to be retained. If two or more panel members disagreed with the intended concept elements, the statement was reworded or completely changed and resubmitted for validation. The Q sort deck was also tested for reliability by the test-retest method. With a minimum one-week interval between the two sortings, all correlations, except one,

⁴⁶Flynn, Journal of Broadcasting, Vol. XVI, No. 1 (Winter, 1971-72), p. 65.

were computed at the .01 level of confidence; the remaining sorting was computed at the .05 confidence level. The instrument was then administered to twenty-nine respondents taken from various ages in three socio-economic groups. They were asked to sort the statements along a quasi-normal distribution, ranging from those statements which "most describe" a respondent's "ideal" television station to those which "least describe" the ideal station. The resulting data were computer correlated and the results factor analyzed.

A total of eight factor types were identified from the statement rankings of each respondent who loaded significantly within each factor. Descriptions of these types were also derived from observations made by the interviewer about respondents who represented the factor types. Flynn labeled the eight factors: (1) The Reality Seeker; (2) The Excitement Seeker; (3) The Self-Improvement Type; (4) The Perfectionist; (5) Good Taste Seeker; (6) The Fun Seeker; (7) Interest Seeker; and (8) The Escapist. The author concluded that, because many large market areas frequently have many television stations and because CATV outlets also carry a large number of stations, the relatively large number of audience segments identified in the study is desirable. Each "ideal" station, then, would theoretically program for its target audience. This would eliminate overlapping and repetition of programming, provide opportunities for new and varied programming

and also eliminate the emphasis on the traditional rating services. The desirability of such a system is supported by Quall, who foresaw the evolution of the essential conditions for audience segmentation:

The multi-set homes in both radio and television involve varied selections of programs. The increase of UHF stations should mean an expanded condition resulting in greater audience selectivity. In the future, information concerning predefined "groupings" of people will be needed by advertisers. The coming fractionalization of the total mass audience by multi-sets and more stations may itself condemn a system which equated success with the largest audiences.⁴⁷

On a larger scale, author Alvin Toffler predicted in a speech at Louisiana State University that the next quarter century and beyond will be characterized not by the "masses," but by small groups of individuals with their own unique characteristics and needs. Toffler suggested that all phases of society, including the mass media, will have to adapt to these changing conditions.⁴⁸ If these prophecies become reality, then the development of techniques for qualitative audience measurement is essential.

There have been a number of studies performed which investigated viewer preferences for personality correlates of television newsmen; most have used the

⁴⁷Quall and Martin, p. 49.

⁴⁸Alvin Toffler, "Learning For Tomorrow," Public Lecture presented on October 2, 1975, Louisiana State University, Baton Rouge.

traditional "R" methodology.⁴⁹ But, Cathcart inquired into the subject from a unique point of view. Wondering what kinds of viewers prefer certain types of television newscasters, rather than "how many," the experiment was conducted with the use of Q methodology.⁵⁰

Proceeding on the premise that newscasters assume the role of television "personalities," it was hypothesized that viewers tune to a specific newscast for more than simply to be informed on the day's events. After all, Cathcart suggested, any adequate newscast will at least contain the basic news stories relevant to a particular market area. Habitual viewing of one station's news programming to the exclusion of other competitors in the area, then, must go beyond the quest for information; it must seek to satisfy certain needs, wants and desires which the viewer possesses. The study sought to identify the qualities of characteristics of television newscasters which viewers use to satisfy their existing motives in this area.

⁴⁹See, for example, Mark Munn, "The Profile of Station Personality," Journal of Broadcasting, Vol. 2, No. 1 (Winter, 1957-58), pp. 13-24; Mervin D. Lynch and Edward H. Sasserath, "Dimensions of Personality Association of Television Network Newscasters," Journal of Broadcasting, Vol. 10, No. 1 (Winter, 1965-66), pp. 33-43; and Philip Anast, "Personality Determinants of Mass Media Preferences," Journalism Quarterly, 43:4 (Winter, 1966), pp. 729-32.

⁵⁰William L. Cathcart, "Viewer Needs and Desires in Television Newscasters," Journal of Broadcasting, Vol. XIV, No. 1 (Winter, 1969-70), pp. 55-62.

The Q-sort instrument employed in the study was a set of forty-eight unstructured statements of qualities or characteristics of television newscasters which had been drawn from two sources: (1) a series of twelve interviews with viewers of wide-ranging ages in the market area to elicit preference concepts concerning personality and style of local and national newscasters; and (2) a newscaster preference questionnaire mailed to fifty respondents in the market area. The final Q instrument was also supplemented by the researcher's personal addition of some statements covering suspected personality-style loopholes which the other two techniques failed to generate.

Thirty-two television viewers from the local market area were recruited for the Q task, the selection based upon the elements of age, sex, education and amount of viewing. Each respondent was asked to distribute the statements along a quasi-normal curve, similar to the respondent tasks cited earlier in this section. The Q-sort was performed twice by each respondent; the first according to the criterion of describing a "favorite" newscaster and the second, according to the criterion of describing a hypothetical "ideal" newscaster. Cathcart maintained that the second, "ideal" sorting was the most crucial, since it would seek to identify newscaster characteristics which the viewers prefer and which may satisfy existing viewer needs, but which were not available from current newscasters.

Each person's total responses were then correlated with every other respondent's data under both conditions of instruction. Using a statistical procedure (McQuitty's linkage analysis)⁵¹ to identify clusters or types of viewers who expressed highly similar likes and dislikes in television newscasters, five such groups were found among the "favorite" newscaster correlations and seven types were identified from the "ideal" correlations. Since the "favorite" sortings were employed primarily for data eliciting and comparison purposes, the "ideal" types' data were given the most importance with "Type A" standing out as the clearest and most significant expression of ideal newscaster standards. Cathcart provided a thumbnail sketch of this model:

Type A: An experienced news authority, with a pleasant appearance, who presents an unbiased factual newscast and believes in what he says.⁵²

Each of the six remaining "ideal" types which were identified in the study were less statistically significant and were variations of "Ideal Type A."

The researcher concludes that Q methodology can be used successfully to examine qualitative aspects of a

⁵¹Louis L. McQuitty, "Elementary Linkage Analysis for Isolating Orthogonal and Oblique Types and Typal Relevancies," Educational and Psychological Measurement, XVII (Summer, 1957), pp. 207-228.

⁵²Cathcart, Journal of Broadcasting, Vol. XIV, No. 1 (Winter, 1969-70), p. 59.

television newscast. While traditional quantitative ratings provide numerical information about the size of a newscast audience, the procedure employed in the Cathcart study can provide insight into the reasons people either watch or, conversely, fail to watch a newscast. The author further assumes that a newscaster who meets the needs and desires of a specific social cluster of viewers will, in fact, be watched by those people. In effect, a direct correlation is hypothesized between viewers who possess certain needs and newscasters who are of the type that can satisfy those needs. However, such an assumption remains to be empirically proven; in fact, such a correlation may not exist at all.⁵³

The preceding review of research studies to this point has been primarily designed to provide insight into the nature of the work that has been conducted into qualitative audience needs of and reaction to television programming. All have used Stephenson's Q methodology, upon which the present study is based. However, a study by Topping⁵⁴ does not employ Q, but remains relevant to the present investigation because it explores the development of a new

⁵³Austin Snare, David H. B. Bednall and Lyndall M. Sullivan, "Relationship Between Liking and Watching TV Programs," Journalism Quarterly, 49:4 (Winter, 1972), pp. 750-753.

⁵⁴Malachi C. Topping, "The Forced Choice as a Measure of Television Station Image," Journal of Broadcasting, Vol. X, No. 2 (Spring, 1966), pp. 155-159.

technique to measure television station image, an objective closely linked to the identification of television news image. Although the instrument itself proved somewhat cumbersome to construct, it did prove successful in identifying at least two factors which were found to be of importance in the television station image.

The forced choice instrument used in the Topping study was developed in four stages. First, college student's essays on television stations were collected and over a thousand descriptive phrases and statements were gleaned from the essays which contained some reference to stations in general. These were classified into one of three groups describing the personnel, the programs or the audience and then were divided into sixty-seven subgroups covering a wide spectrum of television station impressions. The resulting one hundred, fifty statements were included in a questionnaire mailed to a large panel of residents of the state of Oklahoma. The respondents were requested to compare the statements with any specific television station they considered to be "good," "average" or "poor." The responses were analyzed to establish two indices: a "preference index," i.e., a weighted sum of item scores and a "discrimination index," i.e., an index which varied according to the difference in scoring for "good" and "poor" stations on each item. Rejecting any item with a standard deviation of more than 1.3, a total

of sixty-seven of the original items were deemed acceptable and, of these, twenty-seven were included in the station image survey.

A total of one hundred, thirty-one questionnaires were completed in the relatively small town of Guthrie, Oklahoma (pop., approx. 9500). Each respondent completed the forced choice items on only one station out of three within range of reception. At the close of the interview, the respondent was asked which of the three possible stations was preferred. This provided a "face" evaluation of the stations for comparison to the forced choice responses.

Two differences in group responses resulted. Forced choice ratings by the forty to fifty-nine age group indicated a significant preference for the station with the highest "face" evaluation. Also, heavy television viewers rated all three stations on a similar basis, while the light viewers were significantly impressed with the one station ranked highest in the overt evaluation. Of the twenty-seven paired items, four were found significantly different by the respondents. The station favored in the face evaluation by thirty-eight per cent was ranked significantly higher than the other stations on two items; both concerned speed of news coverage. Items concerned with a variety of programming also showed significance in the item analysis of the statement pairs.

The station ranked lowest in "doing the best job" was rated high in variety of programming.

The researcher concluded that the forced choice technique was able successfully to probe behind a face evaluation response. Evidence was also found that the person who views television on a heavy basis is less impressed with the difference between stations than the more discriminating viewer who watches fewer hours of television. Two factors were also isolated which may have some relevance to station image. The station ranked high on "doing the best job" was also rated high on speed of news coverage. The results did not confirm the converse, that is, a station doing a "poor job" would have slower news coverage. They did show that the station held in low esteem by viewers rated high on variety of programming. From this data, it was suggested that a station wishing to improve its image in the community might conduct an intensive campaign at least to raise the speed of its news coverage and to make this fact known to potential viewers. It is interesting to note in this context that the one factor found to be pertinent to a positive station image was in the area of news programming. Perhaps it would be valuable to compare a station's news image with its overall image. From the Topping study, it appears that a station's news image has a direct effect on its general image and that the two are highly correlated. There is a need for further research in this direction.

While Thayer did not use Q-methodology, he did approach the task of learning about the compositional elements of program audiences.⁵⁵ Instead of devising a study which would seek to generate information about the qualitative dimensions of television viewers, Thayer recognized the wealth of information which already existed in the form of demographic data gathered from existing commercial rating services.

Specifically, data taken from three consecutive National Television Audience Reports, published by the American Research Bureau, were compiled and averaged. An analysis was then made in terms of program types and apparent demographic characteristics of their respective viewers.

The findings were relatively lengthy and the interested reader can find them listed in detail in the Thayer study, cited herein. What is most pertinent to the present discussion is that the Thayer approach demonstrates that the broadcaster and media researcher have available a great wealth of data supplied on a regular report basis by commercial research firms and agencies. By cross-tabulating such demographic information, additional knowledge concerning the qualitative nature of a prospect-

⁵⁵John R. Thayer, "The Relationship of Various Audience Composition Factors to Television Program Types," Journal of Broadcasting, Vol. VII, No. 3 (Summer, 1963), pp. 217-225.

ive viewing audience can be obtained. As the author suggests:

It is evident to most people in the broadcasting business that different kinds of persons are attracted to different kinds of programs. Knowing the precise differences that exist, then, becomes extremely important to the broadcaster and advertiser.⁵⁶

This philosophy, of course, is consistent with the expressed purposes of the present research.

It was noted earlier in this chapter that Q has been applied to a variety of problems in research areas other than communication. Science, psychology and the social sciences in general are notable examples. Within the area of communication studies, Q methodology has been applied successfully not only to the generation of new television program concepts and television station images, but within the field of journalistic news as well. By this, reference is made particularly to the investigations of MacLean⁵⁷ and others into the criteria used by "gatekeepers" or editors in the selection of news.

The philosophy which MacLean espouses in his Q studies of newspaper readers closely approximates the theoretical rationale underlying the present investigation

⁵⁶Thayer, Journal of Broadcasting, Vol. VII, No. 3 (Summer, 1963), p. 218.

⁵⁷Malcolm S. MacLean, Jr., "Communication Strategy, Editing Games, and Q," Science, Psychology, and Communication: Essays Honoring William Stephenson, ed. Steven R. Brown and Donald J. Brenner (New York: Teachers College Press, 1972), pp. 327-344.

into television news images. Having carried out a number of newspaper and magazine readership studies patterned after "traditional" approach techniques, the author observed that data reflecting percentages of each sex, for instance, who read all or part of a news item on a particular page, would be valuable to advertisers who want proof that they're getting their money's worth, but of limited value to editors. Some of the reasons advanced to justify this critique closely parallel similar arguments in favor of qualitative studies in the broadcast media:

1. Since the sample usually includes only those who actually read a publication, nothing is learned about why some potential readers did not read that publication.
2. The materials sampled usually include only pages in a certain issue. Thus, nothing is learned about how readers might respond to items which editors chose not to include in that publication.
3. Each quantitative interview usually proves so arduous a task that interviewers find it almost impossible to probe for reasons behind a respondent's reading or ignoring an item or an entire publication. In effect, no indications are obtained of existing needs which a potential reader may be striving to satisfy.⁵⁸

It was for these reasons and others that MacLean began to employ Q, a technique which proved successful in uncovering motives and fine descriptive data of audience characteristics inadequately served by traditional methods.

⁵⁸MacLean, "Communication Strategy, Editing Games, and Q," Science, Psychology, and Communication: . . . Brown and Brenner, ed., pp. 329-330.

As journalism professor at Iowa State University, MacLean has conducted a number of Q studies within the context of print media audiences. It is not necessary to discuss the results of these studies at this time, since the main point of the present discussion is to illustrate valuable applications of Q in general audience analysis investigations. However, a brief overview of one of these studies can provide some additional insight into the potential of this specific use of Q.

MacLean and Kao⁵⁹ developed a series of small studies of reader values and editorial judgment in the early 1960's. One-hundred twenty pictures from two prominent magazines were organized into interest categories and split evenly into two matched samples. A small, stratified sample of eighteen respondents were then selected on the basis of differences in sex, age and education and requested to Q sort the pictures according to preferences for inclusion into a so-called "ideal" magazine. Factor analysis of the results yielded two reader types: one type valued highly "peaceful" pictures; the second type seemed to highly value "violent" pictures. The two types correlated at zero value with each other, making them mutually exclusive.

⁵⁹Malcolm S. MacLean, Jr. and Anne Li-An Kao, "Picture Selection: An Editorial Game," Journalism Quarterly, 40 (1963), pp. 230-232.

These results were then used as the basis for an experiment in "editorial prediction."⁶⁰ Practicing newspaper editors, journalism students and education students were divided into four information categories and were asked to Q sort the sample pictures according to how each perceived the two types found in the earlier study would prefer them. One-fourth of the "editors," (a generic name encompassing each of the three types of respondents), was given only minimal information about the "types;" another fourth was given detailed information; a third fourth of the respondents was given the actual display of sixty pictures Q sorted by each reader type; and the final group of respondents were given both detailed information about each type and the informational Q sort of the third segment. Criterion scores were the correlations between editors' predictive Q sorts and the actual reader sorts.

Briefly, the results indicated that the experienced editors, i.e., the practicing newspaper editors, performed no better than the journalism student editors or education student counterparts. But the predictive correlations did rise as the quantity of information provided the respondents was increased. It was also interesting to note that the practicing editors with only a minimum of information

⁶⁰Malcolm S. MacLean, Jr. and Anne Li-An Kao, "Editorial Prediction of Magazine Picture Appeals," Iowa City: School of Journalism, University of Iowa, 1965.

about the reader types performed very poorly in predicting women reader's preferences. They indicated that they believed all readers were interested in violence stories, for example, including both men and women. The previous study's "types," however, confirmed the opposite information. This latter finding, it seems, emphasizes the type of data which can be obtained by the use of a qualitative technique such as "Q". More superficial "traditional" techniques of audience analysis are probably incapable of this type of fine probing and identification.

Given the kind of data produced from the above investigations, a professional communicator can refine tactics and create strategies to increase audience participation in his medium, whether it be print or electronic. Anyone who is involved with programming for audiences at any level has probably observed audience feedback at least at the intuitive, observational level. Qualitative audience analysis tools, such as "Q", merely continue this process by making such observations more tangible and verifiable. This study on television news images is designed to achieve these ends.

CHAPTER III

RESEARCH METHODOLOGY

This study was undertaken for the purpose of ascertaining the manner in which television viewers perceive television news programs, whether there are significant preferences and non-preferences for television news formats and elements and to determine an hypothesized relationship between kinds of television viewers and similar ways of thinking about television news, i.e., program images. Three Baton Rouge, Louisiana, commercial television stations were employed as focal points of the study with an objective of determining existing viewer images for the three existing news programs together with viewer images for a theoretical "average" and "ideal" news format. The results of each image category were compared with each other and the viewer nature of each category was analyzed. A composite picture of each image was then constructed and resultant interpretations drawn.

Derivation of Statements

Prior to the construction of the sorting statements for the Q technique, a series of interviews was conducted for the purpose of obtaining existing attitudes and ideas concerning televised news from the public. With

regard to one of the hypotheses of this study, it was predicted that similar ways of thinking about news programs would become obvious with the use of more than one interviewee. That is, it was hypothesized that television news would be divided into a number of basic ingredients by various individuals and that these elements would overlap among respondents.

Since it was important to survey representatives of various classifications of individuals, a sampling technique was employed to contact persons for the initial phase of the study. Geneva Carroll and Tom Hall of the Louisiana Office of State Planning, who conduct large sample research studies on a routine basis, recommended a sampling triad division based on socio-economic status, age and race.¹ Similar divisions have been employed in other survey-oriented studies, among them Nattin,² Dickinson³ and others. A fourth dimension, education, was added as a further descriptive measure of the interviewees.

¹Interview with Geneva Carroll and Tom Hall, Researchers, Louisiana Office of State Planning, September 14, 1975.

²Nathan H. Nattin, III, "An Analysis of Characteristics and Preferences of Daytime Television Viewers of the Middle to Upper Middle Income Group in Two Areas of Baton Rouge, Louisiana" (unpublished Master's thesis, The School of Journalism, Louisiana State University, 1966).

³John A. Dickinson, "A Q-Sort Analysis of Men and Women's Reading Interests in Pictures" (unpublished Master's thesis, The School of Journalism, Louisiana State University, 1972).

Thus, the most recent census data for the city of Baton Rouge were consulted to obtain such information. It was decided to limit the respondent sample to residents of Baton Rouge, since this is the city in which the three commercial television stations used for this study are located, thus making it the primary market area. It was assumed that residents of the area would be familiar with the news programming in Baton Rouge and would have some opinions concerning broadcast news in general. This presumption proved correct. Without exception, each respondent contacted in the focused interview phase of the study demonstrated familiarity with local television news and expressed concrete opinions concerning their likes and dislikes, preferences and non-preferences for the subject. Those persons who later agreed to participate in the Q sort phase of the study also verbally expressed and manually demonstrated, through the task, their familiarity and opinions concerning television news.

Throughout the study, the "structured" respondent sample was used, employing the above-mentioned elements of socio-economic status, age and race as the structured design. It is generally agreed that it is desirable to use a structured sample design in small sample studies, such as the present one, for two reasons: such a design allows the researcher to predetermine the classes of respondents for the study; and second, it allows the researcher to specify how many respondents within each class

should be interviewed. As Schlinger suggests,

Structured samples are not intended to represent, proportionally, the characteristics of the consumer population. Instead, the structured samples are used in order to make certain that relevant sub-classes of respondents are sufficiently represented even though the incidence of those sub-classes in the population may be relatively small.⁴

When, for example, the purpose of a research project is to explore implicit hypotheses about the relationship in attitudes and response between certain groups of individuals, such as is the case in the present study, then the design of the structured sample should be geared to that purpose. Since television news images are being investigated in the research currently being described, then it seems imperative to include representatives of various classes of people in the community, with the assumption that the views of each of these "publics" should be taken into account and compared before interpreting the results.

Two census publications proved useful in isolating representative areas of the city from which to draw the initial and later sample. These were the 1970 Census of Housing and Block Statistics and the 1970 Census of Population and Housing, both relating to Baton Rouge. It was discovered that there are no universally accepted guidelines for dividing socio-economic status into sub-

⁴Mary Jane Schlinger, "Cues on Q-Technique," Journal of Advertising Research, Vol. 9, No. 3 (1969), p. 55.

classes. This criterion is apparently arbitrarily determined by the nature of the study and the purposes of the research. Consequently, it was decided to use the "mean" income for a Baton Rouge family as a springboard for identifying socio-economic status. The average income for the city and the resulting breakdown of socio-economic status used in this study are found in Table II. The median Baton Rouge Housing value was also consulted as an additional indicator of socio-economic status. This figure also appears in Table II. It should be noted, too, that these figures served as general guidelines for identifying appropriate census tracts of the city from which to draw subjects; they were not absolute limitations.

Of the remaining two elements in the structured sample, the age categories were initially left open-ended, i.e., it was felt a cross-section of age groupings would become apparent as potential respondents were contacted on the basis of socio-economic status. It was also felt that representative age groupings were not as important in the initial phase of concept generation during interviews as they were later, during the actual Q-sort tasks.

In terms of race, a goal was set of approximately one-third black respondents and subjects for the study. This was done for two reasons. First, the city of Baton Rouge consists of approximately that proportion of blacks to whites and, therefore, blacks must be taken into consideration with regard to their perceptions of tele-

TABLE II

ANNUAL INCOME, 1970*

Baton Rouge, Louisiana

MEAN	\$10,907
MEDIAN	\$ 9,151

HOUSING VALUES, 1970*

Baton Rouge, Louisiana

MEDIAN	\$17,400
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SOCIO-ECONOMIC STATUS

Baton Rouge, Louisiana

#1 (lower)	\$ 0 - \$ 5,500
#2 (lower middle)	\$ 5,501 - \$11,000
#3 (upper middle)	\$11,001 - \$16,000
#4 (upper)	\$16,001 -

*Sources: 1970 Census of Housing and Block Statistics, B.R.
1970 Census of Population and Housing, B.R.

vision news. And second, Bower found that blacks shared similar or identical opinions concerning television broadcasters and that these shared images transcended age, sex, and socio-economic differences.⁵ It was conjectured, then, that blacks might also share an homogeneous grouping concerning television news images, although this was not stated as a formal hypothesis in the present study.

With these goals set forth, the census data were examined for the purpose of selecting areas of the city which, by the criteria of mean income and median housing value, represent each of the four general socio-economic categories previously determined. Of the forty-eight tracts into which East Baton Rouge Parish is divided, twelve tracts within the city limits were initially selected as meeting the requirements of income and housing value.⁶ Four of these tracts were ultimately selected as having the highest potential of yielding the necessary representatives of this study's structured sample.

Each individual tract into which the city is divided is large and many singular housing blocks are contained within their borders. Consequently, once the tract itself was decided upon, further examination was warranted to select one or two blocks within each tract which was

⁵Robert T. Bower, *Television and the Public* (New York: Holt, Rinehart and Winston, 1973).

⁶These tracts were Tracts 1, 2, 3, 10, 18, 19, 20, 21, 25, 26.01, 26.02, 33 and 38.01.

perhaps most representative of that area. This was done by using the average housing value for each block. The block with a housing value most closely approximating the average housing value for the larger tract was selected for further consideration. Table III lists the four city tracts decided upon, their mean and median income levels and average house values. Also listed are the block or blocks selected within each tract and their average house values.

Once this information was isolated, the Baton Rouge City Directory⁷ was consulted to obtain residents' names for each address. It was felt that respondent cooperation could more easily be enlisted if the prospective interviewer used the personal approach in making the initial contact. This assumption proved to be correct and, in fact, the respondents frequently greeted the interviewer with cordial welcomes once their names were heard. If they were curious, the interviewer immediately related how the names were obtained and how the respondent came to be contacted. No one patently refused to participate in the initial interview situation. A few were admittedly skeptical, wondering if there was not an ulterior motive for the contact. Since Baton Rouge recently installed a cable television system, the question did arise as to whether the interviewer was a salesman for the company.

⁷1975 Baton Rouge City Directory (Dallas, Texas: R. L. Polk and Co.).

TABLE III
SELECTED HOUSING TRACTS
AND BLOCKS

CITY TRACT	AVERAGE ANNUAL INCOME	MEDIAN ANNUAL INCOME	AVERAGE HOUSE VALUE
3	\$8741.00	\$8452.00	
Block 409			\$12,100.00
Block 208			\$ 9,100.00
<hr/>			
10	\$5606.00	\$4628.00	
Block 107			\$ 9,600.00
<hr/>			
26.01	\$14840.00	\$12452.00	
Block 409			\$18,300.00
Block 609			\$13,800.00
<hr/>			
38.01	\$30879.00	\$23798.00	
Block 105			\$49,000.00
Block 103			\$60,000.00

The interviewer was also recognized by a few respondents as being a television anchorman on one of the local news stations. In this instance, they were assured that the study was unrelated to the investigator's part-time employment. This seemed to encourage them to relate their opinions of television news.

The initial, in-depth interviews served two purposes. One was to provide information of a demographic nature as well as specific material relating to the investigation at hand. This was done by use of a short questionnaire which each interviewee was asked to complete. This same questionnaire, found in Appendix A, was also completed by each respondent in the final Q-sort task, performed later. Another purpose of the in-depth interviews, and, in this case, the primary purpose, was to elicit as many different ways of thinking about television news as possible. These concepts, in their final form, were used to construct the population of statements for eventual Q-sorting.

In all, twelve open-ended, focused interviews were conducted. A focused interview is defined by Merton as "an attempt to elicit as complete a report as possible of what was involved in the experience of a particular

situation."⁸ The springboard topic for the interviews is reflected in these questions which were put to each respondent: "What is your opinion of television news today?" "What do you like most about it?" "What do you dislike?" "Why do you watch the news on television?" The experimenter remained encouraging, but as uninvolved as possible. The interviewees were asked not only to think about the superficial aspects of television news (whatever the subject would define as "superficial"), but to search beyond the surface to more subtle areas of attitudes and feelings. Also, a purposeful effort was made to establish a positive rapport between interviewer and interviewee, so that the respondent would be relaxed and uninhibited. The interviewer emphasized prior to the start of the interview that no value judgments were being imposed on the interviewee's comments and that he could feel free to express his ideas openly. The interviews were conducted in private sessions, in the respondents' homes, and the interviewer was satisfied that the interviewee's comments were spontaneous and truthful. Termination of the interview procedure was made after twelve interviews because the interviewer noted that, with the latter sessions, no new information was being offered concerning television news and the sessions

⁸Robert F. Merton, Marjorie T. Fiske and Patricia L. Kendall, The Focused Interview: A Manual of Problems and Procedures (Glencoe, Illinois: Free Press, 1956).

were becoming redundant. The experimenter personally conducted each interview which lasted from one-half to one hour. The interviewer began with the first house on the block listed in the City Directory and, bypassing unattended homes, continued until a proportional representation of interviews was obtained from that block.¹⁰ The sample composition for the focused interviews is found in Table IV. A summary of concept statements from which the Q-sort statements were constructed appears in Appendix B.

It should be noted that some of the concept statements pertain to the nature of televised news, while some of the descriptions pertain to the reasons why an individual would watch the news. Numbers 1, 2, 15, 16 and 19 are examples of the first concept category while numbers 3, 14, 17, 21 and 27 are examples of the second concept category. In composing the statements for sorting, only those concepts which comprise the first category were useful. Of these, four concepts seemed to emerge as the most universal among the interviewees and were chosen around which to construct the statements. These were

¹⁰By "proportional representation" is meant a form of quota sampling which is a "... type of judgment or convenience sampling." "The aim of setting such quotas is to insure that the sample is distributed, with respect to specified characteristics, in proportion to presumably known population totals." National Association of Broadcasters, Standard Definitions of Broadcast Research Terms, A Guide Prepared by the Research Division of the National Association of Broadcasters (January, 1967), p. 33.

TABLE IV

SAMPLE COMPOSITION OF
FOCUSED INTERVIEWS

Number = 12

	<u>Male Caucasian</u>	<u>Female Caucasian</u>	<u>Male Negro</u>	<u>Female Negro</u>
<u>Age:</u>				
20-28				2
29-34	1			
35-40				
41-45	1			
over 45	2	2	3	1
<u>Annual Income:</u>				
less than \$5500	2			2
\$5501-\$11000	1		3	1
\$11001-\$16000		1		
more than \$16001	1	1		
<u>Education:</u>				
less than high school			3	1
high school graduate				1
some college	1			1
college graduate	2	1		
post-graduate	1	1		

divided into their logical extremes along each continuum, making a total of eight television news ingredients.

(See Table V).

The sorting stimuli consisted of a deck of statements, each describing a possible television scene. Each description was derived by combining two of the eight television news ingredients--all combinations creating a deck of fifty-six statements. The first statement combined ingredients #1 and #2, the second statement combined ingredients #1 and #3, etc. The combination graph is shown in Table VI.

It should be noted that this particular procedure of statement construction, i.e., combining two concept elements to create a single description, is consistent with Stephenson's notion of using a balanced block design. He suggests structuring the sample, in this instance, the statements, by composing them artificially, instead of selecting it at random from a parent universe.¹¹ The purpose of such a design is to maximize the inclusion of the study's underlying theory into the Q-sort stimuli. Stephenson, and, later, Monaghan,¹² describe this design as a technique which incorporates one extreme of each of

¹¹William Stephenson, The Study of Behavior: Q-Technique and its Methodology (Chicago: The University of Chicago Press, 1953), p. 66.

¹²Robert Monaghan, "A Systematic Way of Being Creative," Journal of Communications, XVIII (March, 1968), pp. 47-56.

TABLE V
DEFINITIONS OF TELEVISION NEWS ELEMENTS

TELEVISION NEWS: The reporting of current events by a television station. The events may comprise a combination of international, national, state or local happenings or they may be limited to news events within a single category. The news programming may originate on a network basis such as "The CBS Evening News with Walter Cronkite" or it may originate from an individual station.

1. Objective Reporting: The reporter simply transmits the facts of the story, exactly as they happened, without any kind of personal bias.
2. Reporter Class "A": The type of reporters included in this category may be any or all of the following:
 - a. male
 - b. "white" or Caucasian
 - c. mature or experienced
3. "Live" Format: Here, the news is spontaneous and reported on an immediate basis without the use of a time-delay device such as a filmed report. It is usually presented from the television station itself.

TABLE V (continued)

4. Professional Reporting: The statement reflects a news presentation that has a minimum of technical errors. It also suggests a reporter who believes in news as a public service and who is dedicated to his work.
 5. Interpretative Reporting: The reporter uses the facts of the story as a starting point for commentary. The report may be all opinion, as in an editorial, or it may be factual combined with personal conclusions.
 6. Reporter Class "B": The type of reporters included in this category may be any or all of the following:
 - a. female
 - b. "black" or a minority member
 - c. young or inexperienced
 7. "Filmed" Format: These are news happenings originating from the scene of an event before the news program is broadcast. The report is first recorded on film or video tape for later broadcast.
 8. Non-Professional Reporting: The newscast is represented as containing many technical flaws and the reporters as possessing little sense of dedication to the work.
-
-

TABLE VI
TELEVISION NEWS ELEMENT
COMBINATION GRAPH

	1	2	3	4	5	6	7	8
1		1,2	1,3	1,4	1,5	1,6	1,7	1,8
2	2,1		2,3	2,4	2,5	2,6	2,7	2,8
3	3,1	3,2		3,4	3,5	3,6	3,7	3,8
4	4,1	4,2	4,3		4,5	4,6	4,7	4,8
5	5,1	5,2	5,3	5,4		5,6	5,7	5,8
6	6,1	6,2	6,3	6,4	6,5		6,7	6,8
7	7,1	7,2	7,3	7,4	7,5	7,6		7,8
8	8,1	8,2	8,3	8,4	8,5	8,6	8,7	

the generated concepts into a single statement. In his study, Flynn used this procedure with success.¹³

The present study employed a variation of the balanced block design for statement construction. Rather than include a reference to each television news element in every statement, only two such elements were so used. This allowed for a greater number of non-repetitive items to be generated and allowed for a more discriminating interpretation of each of the factors. For example, the true balanced block design using only four television news concepts would generate only sixteen statements, $A_1B_1C_1D_1$, etc. This would necessitate at least tripling, as Flynn did, the number of statements for each possible combination.¹⁴ Further, in analyzing and interpreting the computer-derived factors later, one would have to conclude that all four elements were intended to be placed in a certain location along the Q-sort continuum, when, in fact, only one or two of those elements served as the motivating force for such placement. The others, per force, had to go along since they could not be separated from the statement. By including fewer elements in each

¹³James H. Flynn, III, "The Ideal Television Station: A "Q" Study," Journal of Broadcasting, Vol. XVI, No. 1 (Winter, 1971-72).

¹⁴Schlenger suggests that 55-75 items would be ideal for statistical reliability, but would not be a large enough number to overwhelm the respondents. Schlenger, Journal of Advertising Research, Vol. 9, No. 3 (1969), p. 54.

statement, the ultimate placement along the continuum would ensure that each individual element was intended to be so placed. The author used the balanced block design variation in a previous study with success and was even encouraged by Monaghan, the author of an article in support of the traditional design.¹⁵

In constructing the statements, an effort was made to use language similar to that used by the initial respondents in the interview situation. It was felt that this would make it easier for the respondents to identify with the items and would eliminate any possible cause for embarrassment they might have in responding to a particular statement. The language level was also a consideration since it was felt some of the subjects, especially those in the lower socio-economic levels who had less formal education, would have difficulty understanding the meaning of a statement, cloaked in technical jargon.

The statements were also edited to conform to guidelines set forth by Stephenson. He suggests, in brief, that literary qualities such as conciseness and clarity be considered, that the statement sample be representative of the universe from which it is drawn and that the sample be balanced with respect to positive and negative statements. Goodling and Guthrie also

¹⁵Simon, (unpublished Master's thesis, Department of Communications and Behavioral Sciences, The Ohio State University, 1969).

propose additional guidelines in selecting Q-sort statements. They suggest that the items should have a minimum amount of intra-subject variability, i.e., a range of category placement for each individual in a test-retest context. This would increase the instrument reliability by eliminating the more unreliable items. They suggest, too, that items should have a maximum amount of intra-subject variability, i.e., used in a large number of sorting categories, thereby increasing the test's differentiating power by increasing the range of responses to the items. Finally, they suggest the items should have neither a strong negative nor a strong positive value for the different sorts used.¹⁶

These criteria were applied to the statements during their construction and during validation procedures. The Q-sort stimuli went through several steps of refining until their validity and reliability were established. A panel of five people was given a list of the eight possible television news elements, randomly numbered with their definitions, and was asked to indicate, by the ingredient number, which of the kinds of television news was reflected in the statement. The element definitions were derived from observations and concept data taken from the initial focused interviews. The "Professional"

¹⁶R. A. Goodling and G. M. Guthrie, "Some Practical Considerations in Q-Sort Item Selection," Journal of Counseling Psychology, Vol. 3 (1956), pp. 70-72.

element was also defined with reference to treatments of this subject by Gills,¹⁷ Leroy,¹⁸ and Hall.¹⁹ (See Table V). The results were then tabulated according to the number of times that an item was placed in the pile at the opposite end of the intended element. For example, if a statement was written to include the idea of professionalism and it was placed in the Non-Professional Reporting category, then the results were recorded. A criterion of four concurring respondents was chosen for the minimum statement validation threshold. That is, if four or five of the validators selected the two television news elements intended for that statement, then it was retained for the final Q-sort deck. If two or more of the validators did not agree with the elements intended for a statement, then it was revised and resubmitted. Flynn used this criterion in his study,²⁰ although the present author used the weaker criterion of two disagreements with a statement in a

¹⁷D. Hugh Gills, "Broadcasting as Profession: A Socio-Economic Approach," Journal of Broadcasting, Vol. 11, No. 1 (Winter, 1966-67), p. 73.

¹⁸David J. Leroy, "Levels of Professionalism in TV Newsmen," Journal of Broadcasting, Vol. 17, No. 1 (Winter, 1972-73).

¹⁹Richard H. Hall, "Professionalization and Bureaucratization," American Sociological Review, 33: (February, 1968), pp. 92-104.

²⁰Flynn, Journal of Broadcasting, Vol. XVI, No. 1 (Winter, 1971-72).

previous study.²¹ It was necessary to revise eleven of the original fifty-six statements before the Q-sort deck was validated. (See Appendix C). The Statement Validation form used for each respondent in this phase of the study is found in Appendix D. It will be noted that each statement number is listed with a corresponding place to tabulate its validation.²²

Once the statements were validated for their television news element composition, it was necessary to check the instrument for reliability. Thompson, et. al, define this concept as

. . . the extent that . . . the same test gives similar results when repeated on two occasions. In a word, reliability means consistency.²³

Thus, the test-retest method was employed. Edwards cautions that this technique for measuring reliability may present certain difficulties, in that if the interval separating the two administrations of the test is short, such factors as memory and practice may taint the results of

²¹Simon, (unpublished Master's thesis, Department of Communications and Behavioral Sciences, The Ohio State University, 1969).

²²Those statements which required revision were: 1,4; 1,5; 3,1; 3,8; 4,8; 6,8; 7,8; 8,3; 8,4; 8,5; 8,7.

²³George G. Thompson, Eric F. Gardner and Francis J. Di Vesta, Educational Psychology (New York: Appleton-Century-Crofts, Inc., 1959), p. 80.

the second administration.²⁴ However, it is doubtful if these potential problems apply to the present investigation. It will be noted that the nature of the Q-sort items is such that it would require a phenomenal memory to recall over a period of time which statement was placed in a particular sorting category. Further, it would be extraordinary to recall a sufficient number of the statements to materially affect the statistical results. Finally, the actual correlations obtained by this procedure were highly significant, more than compensatory for any possible intervening variables.

A total of eight individuals were asked to sort the cards representing their "ideal" television news program, one of the criterion later used in the actual study. A week later, they were presented the same cards and the same set of instructions. The results of each sorting were recorded on Q-Sort Bar Graphs, a sample of which is found in Appendix E, and correlation coefficients were computed between the two sortings. The Bar Graph proved highly satisfactory for this task since it served not only as a record of the sorting, but provided an immediate check that the correct number of cards were put in each column. The structure of the Graph also met the normal distribution requirement of the Q-sort. The Instrument Reliability Data

²⁴Allen L. Edwards, Statistical Methods for the Behavioral Sciences (New York: Holt, Rinehart and Winston, 1964), p. 177.

Sheet, a sample of which is found in Appendix F, was then used to transfer the data from the Bar Graph for comparison purposes. While the card number was recorded in each square on the Bar Graph, the score assigned to each card is the figure that was brought over to the columns of the Data Sheet. When the correlation between the fifty-six pairs of digits was determined, the result was the reliability factor of the Q-sort instrument.

The procedure used for determining these correlations was primarily based upon the differences between the single digit values from each of the two sorts. A Tally Sheet was devised (Appendix G) to bring together the differences of the paired values from the Data Sheet. In a single operation, all the pairs that differed by one column placement on the Bar Graph were brought together and multiplied by their square which, in this case, is one. Those pairs which differed by two column placements on the Graph were brought together and multiplied by their square which, in this case, is four. This process was continued until all of the paired differences were recorded on the Tally Sheet and multiplied by their respective squares. It should be noted that only one statement was placed five columns away from its original column location by only one of the eight sorters (statement #5,7; sorter #4). The remainder of the differences were only three columns apart or less between the two sorts, with the vast majority of statements which did deviate

only one column apart. Approximately half of the statements were placed in identical columns between the two sorts. The correlational or "r" results are shown in Table VII.

TABLE VII
r'S BETWEEN TWO Q-SORTS ADMINISTERED
AT DIFFERENT TIMES WITH
SAME SET OF DIRECTIONS

SORTER	<u>r</u>
1	.842*
2	.826*
3	.864*
4	.796*
5	.880*
6	.872*
7	.853*
8	.886*

*Significant at .01 level of confidence

On the basis of the null hypothesis that the population r is zero, r's obtained on one deck in a test-retest situation need be only .369 for a .01 level of confidence, i.e. an identical sorting could occur by chance less than one time out of one hundred. In the Flynn study, cited above, using Pearson r's as the correlational technique, much lower correlations were obtained, the lowest being

.32, which was significant at only the .05 level of confidence.²⁵ Consequently, the instrument in the present study was considered now to be both valid and reliable and ready to be administered to test the investigation's hypotheses.

Selection of Respondents and The Interviews

The same census data and city tracts and blocks which were used to draw respondents for the initial concept-generation interviews were again consulted to select respondents for the actual Q-sort task. In addition, respondents were drawn from other sources as well. Some acquaintances of the investigator were asked to participate in the study; two social worker acquaintances of the investigator were asked to provide a list of names to contact as possible respondents and a colleague of the researcher, working with black groups as part of another study, was asked to provide a list of names to contact as possible respondents. In this context, it must be recalled that the goal was to select a group of respondents that approximated as closely as possible a structured sample based on the criteria of socio-economic status, age and race with level of education and sex as secondary variables. The areas of the city from which the respondents

²⁵Flynn, Journal of Broadcasting, Vol. XVI, No. 1 (Winter, 1971-72).

were drawn were unimportant. It was the nature of the final group of respondents that was significant.

The potential respondents were contacted either in person or by telephone and were asked if they would like to participate in a study dealing with television news. The experimenter made certain that each potential respondent understood the nature and especially the length of the proposed interview. It was anticipated that the entire task would take between two and three hours for completion and it was essential that each individual had the willingness to devote that length of time. As it turned out, only a few potential respondents indicated that they could not participate because of the time factor; no one declined to participate because of the nature of the task. During the initial contact, each potential respondent was also told that he must possess a familiarity with the three Baton Rouge commercial television stations and their news programming. It was felt that some people, although Baton Rouge residents, simply did not watch the news enough or were not consciously aware of what they were watching, on a critical basis, to have formed definite opinions. This assumption eventually proved correct, as a few potential respondents admitted that they would be unable to participate for this reason.

In all, 31 respondents were found to be satisfactory and willing to cooperate. The demographic and

characteristic break-down of the final respondent group is found in Table VIII.

Each interview was scheduled to take an entire evening. The experimenter either went to the respondents' homes or a small group was invited to meet together. Hilden²⁶ cautions against the use of a large group for the Q-sort task because of the possibility of disturbing influences such as he found in administering the task to a large psychology class. However, he argues that his group experience was unique because the group was large in number, was not forewarned of the experiment and the physical conditions of the room were uncomfortable. None of these conditions were present for the small group tasks in the present study. In fact, the experimenter observed a degree of camaraderie among the respondents who were continually reinforced and encouraged by the presence of their peers. The task perhaps went more quickly than in the individual sortings, for the stragglers were paced by those who were more adept at the sortings.

The sessions began with some light-hearted conversation to establish a positive rapport, during which the researcher provided the respondents with the necessary tools: the Q-sort instrument and three sorting category

²⁶Arnold H. Hilden, Manual for Q-Sort and Random Sets of Personal Concepts, Washington University, St. Louis, Missouri (St. Louis: By the author, 1954), p. 7.

TABLE VIII

	BLACK	WHITE	AGE			
MALES		10	6	4	1	1
FEMALES	6	15	8	4	5	2
			15-28	29-34	35-45	over 45

	<u>ANNUAL INCOME</u>			
MALES	3	4	2	3
FEMALES	1	16	2	0
	less than \$5500	5501-11000	11001-16000	16000-up

	<u>EDUCATION</u> (by levels)				
MALES	0	1	1	7	3
FEMALES	0	0	1	13	5
	less than 8	9-11	H.S. Grad.	some college	post grad.

TABLE VIII (continued)

AVERAGE TV NEWSCASTS WATCHED
PER DAY

MALES	0	5	6	1	0
<hr/>					
FEMALES	0	9	8	2	0
	0	1	2	3	4

N = 31

NATURE OF THE RESPONDENTS

cards. The latter were labeled (1) BEST DESCRIBES; (2) NEUTRAL; and (3) LEAST DESCRIBES. All respondents were given the same instructions:

This is a survey designed to determine what your likes and dislikes are towards news programs on television. To begin with, I will give you a series of short statements describing something you might possibly see while watching the news on television. Some of these you may have seen before and others you may not have, but they are scenes which you might possibly see sometime.

I would like for you to sort these statements according to how well you think they describe the news shows on the three Baton Rouge television stations, Channel 33 news, Channel 9 news and Channel 2 news. I would also like you to put them together so they describe an "average" or mediocre news show and an "ideal" news show, one which you would like to see if you had your choice. In other words, you'll be sorting these statements five different times. We'll begin first with the news on Channel (2, 9, or 33).

First, sort the statements into three piles. In the first pile (BEST DESCRIBES), put all those that you think would be seen on Channel (2, 9, or 33) news. In the second pile, put those statements which you are uncertain about (NEUTRAL). In the third pile (LEAST DESCRIBES), put those statements that you think would not be seen on Channel (2, 9, or 33) news.

Please remember, you may never actually see the very same scene as written on the card, but if you think it is possible that Channel (2, 9 or 33) news would broadcast that description because THAT'S THE KIND OF STATION YOU THINK IT IS, then put the card in the appropriate pile.

Please remember, too, that you should be as honest as possible. No matter how you feel about a particular statement, there are others that feel the same way you do.

I caution you not to spend too much time on any one statement, but sort them quickly, according to your first impression.

If the respondent had any questions about the task at this point, they were clarified and the subject was given the opportunity to work alone, without interruption. The order of sorting the three commercial stations was varied to minimize the possibility of influencing the results on the basis of a priority sort.

Upon completion of this phase of the Q-Sort task, the respondent had nine more sorting category cards placed in front of him: (1) STRONGLY DESCRIBES; (2) HIGHLY DESCRIBES; (3) MODERATELY DESCRIBES; (4) SLIGHTLY DESCRIBES; (5) NEUTRAL; (6) SLIGHTLY NOT DESCRIBES; (7) MODERATELY NOT DESCRIBES; (8) HIGHLY NOT DESCRIBES; (9) STRONGLY NOT DESCRIBES. Each respondent was then given these verbal instructions:

Next, I would like you to split up the "MOST DESCRIBES" pile, picking the two statements which most strongly describe the news on Channel (2, 9, 33, your "average" or your "ideal" station), and place them in the STRONGLY DESCRIBES pile. Then choose the five next most strongly describes statements and place them in the HIGHLY DESCRIBES pile. Your MODERATELY DESCRIBES pile should consist of seven statements which you think definitely describes the station's news, but not as much as the preceding statements. Nine cards go in the SLIGHTLY DESCRIBES pile and, with these, you are almost not sure if they describe the station or not, but they do a little bit.

Then work from the other extreme. From the "LEAST DESCRIBES" pile, choose two statements that you think you would not see at any time on that station's news because IT IS NOT THAT KIND OF STATION and place them in the STRONGLY NOT DESCRIBES pile. Five statements go in the HIGHLY NOT DESCRIBES pile, seven statements in the MODERATELY NOT DESCRIBES pile and nine statements in the SLIGHTLY NOT DESCRIBES pile. The remaining ten statements should be placed

in the NEUTRAL pile. In other words, the statements in the middle pile you are not certain if you'd see them on that station or not.

Again, you should work rather quickly and not waste time.

Each of the category cards had the number for that pile printed on it so the respondent would be certain to finish with the correct number of cards in each pile. Following these instructions, any questions were again clarified and the respondent was given the opportunity to perform this task without interruption. Upon completion of this final phase, the category sortings were recorded on the same Q-Sort Bar Graph that was used in the preliminary reliability validation phase (Appendix E). The respondents were also shown the statements from the two extremes and were asked to explain their motivation to place those statements, above all others, at their respective extremes. In other words, what particular quality or qualities of a statement was so appealing that it was ranked in the STRONGLY DESCRIBES column? Conversely, what characteristic(s) of a statement was so distasteful that it was placed in the STRONGLY NOT DESCRIBES column? The statements were recorded, in the respondent's own words, in the Bar Graph margins.

This process was repeated for each of the five sorting tasks. At the session's completion, the respondents were sincerely thanked for their time and trouble. Questions that were asked regarding the reasons for the

Q-Sortings were answered honestly. This completed the administration of the Q-Sort.

Final Data Preparation

The Q-Sorts and the interviews are intended to discover the images which each subject has of the three commercial television news operations in Baton Rouge, as well as the "average" news operation and the "ideal" news operation. It is not likely that any two individuals will have exactly the same image, although the more similar the individuals are to each other in terms of demographic and social characteristics, the more likely it becomes that they will hold similar images. These "groups" have watched the same kinds of news programs and have received similar input. Although, in certain instances, a case study approach, i.e. describing the images of each of the subjects separately, is desirable, in this situation, it seems more useful to the professional broadcaster and more fruitful for the researcher to generalize and describe the images shared by groups of people. The broadcaster cannot satisfy each audience member; that is an impossibility. Rather, he must present news programs for groups of people. The researcher's task, it seems, is to provide knowledge of the nature of the audience so that the broadcaster can better serve the public.

Factor analysis, then, is the best way to discover these groups of people. Pearson r 's were computed among all

of the respondents for each of the five sets of directions, forming a 31 x 31 matrix. The correlations were then factor analyzed to show patterns of relationships among the variables, i.e., the respondents. A computer program using the Principal Axes method of factor analysis was employed and the resulting factors rotated according to the Kaiser Varimax method to account for the highest variance. The computer at LSU, Baton Rouge, was used for these computations.

The factors were interpreted from factor arrays, calculated by estimating the factor scores of the sample. The factors reflected the most highly correlated patterns or viewing types and also the item selection which best characterized these factors. Interpretations of the actual factors derived are described in the next chapter and conclusions drawn about the existing images of the three Baton Rouge news stations, an "ideal" news operation and an "average" news operation. The three commercial news stations are then analyzed in terms of the "ideal" and "average" news images and implications discussed.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

For the purpose of clarity, the following technical terms are defined according to their use throughout the remainder of this study:

Factor Analysis: The statistical technique of isolating factors, i.e., similar clusters of objects. In Q-methodology, these consist of persons or, rather, responses of persons.

Factor Loading: An expression of the correlation between a respondent's test data and the factor. To the extent that a set of data measures a particular factor, it is said to be loaded on the factor.

Variance: The difference between responses of individuals to a test situation, e.g., Q-sortings. The higher the degree of variance accounted for by a particular factor, the higher the degree of certainty that the factor truly reflects similar clusterings of objects or persons.

Other definitions of technical terms which follow are found throughout the discussion of research methodology in Chapter III.

The Pearson Product Moment correlations were subjected to factor analysis as a grouping procedure. For the study, eight factors were isolated for Station #1 (WBRZ-TV) and eight for Station #2 (WAFB-TV); ten were isolated for Station #3 (WRBT-TV) and ten for Station #5 (Average News Program); five factors were isolated for Station #4 (Ideal News Program).¹ The higher a respondent's loading on a given factor, the more representative he is of that particular factor dimension. Consequently, the tables of factor loadings were analyzed for statistical significance. Since some of the factors may result largely from chance and should be discounted for the purpose of interpretation, a decision was made as to which factors to retain and which to discount. This decision was based upon Stephenson's suggestion that if there are two or more significant loadings within a factor, that factor is significant and should be retained.² Using this criterion, Factor #7 and Factor #9 in Station #5 were discounted since each contained only one significant loading, (.84 and .90, respectively). However, Fruchter suggests that a factor can be considered significant if the product of the two highest loadings

¹A detailed discussion of factors and factor analysis begins on p. 59.

²William Stephenson, The Play Theory of Mass Communication (Chicago: The University of Chicago Press, 1967), p. 25.

(disregarding sign) exceeds twice the standard error of a zero correlation.³ Using this criterion, Factor #9 on Station #5 remains insignificant since the product of the two highest loadings ($.90 \times .24 = .21$) falls below the cut-off point ($2 \times 1 / \sqrt{n}$), where n is the number of items in the Q-sample,⁴ i.e., $2 \times 1 / \sqrt{56} = .26$. But, Factor #7 on Station #5 becomes significant by this criterion, ($.84 \times .37 = .31$) and will therefore be considered separately later on in this chapter.

The factor loadings themselves were considered significant according to a criterion set forth by Stephenson and Danbury.⁵ That is, the loading was significant if it equaled or exceeded three times the standard error of a zero correlation, i.e., $3 \times 1 / \sqrt{56} = .40$. Thus, it was decided that a loading of .40 or greater would be indicative of a meaningful relationship between the respondent and the factor type. Table IX reveals the number of respondents who loaded significantly on each of the factors. The respondents whose loadings were insignifi-

³Benjamin Fruchter, Introduction to Factor Analysis (Princeton: Van Nostrand, 1954), p. 80.

⁴William Stephenson and Thomas Danbury, "Factor Analysis," Mimeograph explanation of centroid solution, Columbus, Missouri, University of Missouri, 1959 and footnoted in Mary Jane Schlinger, "Cues on Q-Technique," Journal of Advertising Research, Vol. 9, No. 3 (1969), p. 55.

⁵Stephenson and Danbury, "Factor Analysis," and reprinted in Schlinger, "Cues on Q-Technique," p. 57.

TABLE IX
NUMBER OF RESPONDENTS IN EACH STATION'S FACTORS

FACTOR	STATION				
	I	II	III	IV	V
1	14	18	10	16	15
2	2	5	4	2	-
3	13	2	4	16	3
4	3	2	3	17	2
5	2	1	2	4	2
6	2	4	3		3
7	3	3	2		1
8	2	3	7		4
9			2		1
10			3		2

cant and were therefore omitted from inclusion in certain factors in an indication that the Q-sorts provided by each of these people were unrelated to the Q-sorts of other respondents in the study. This means that the factor types do not explain the attitudes of such non-factoring persons. If the individuals were of special interest to the researcher, their Q-sorts could be considered separately. Since this was not the case in the present study, the Q-sorts of respondents whose loadings were insignificant on certain factors were entirely omitted from consideration. The Q-sort correlations for the respondents who were included in each factor for each station are presented in Appendix H.

Factor arrays were then computed in order to determine the meaning of each factor. These are discussed in detail in Chapter Two of this study.⁶ Statistically, the factor array is based on the weighted sum of the raw scores that were given to each Q-sort item by the people who loaded significantly on a given factor. But in figuring the factor arrays, the relative magnitude of the loadings for persons representing the factor were taken into consideration. Logically, more weight or significance should be given to the Q-sort scores of those people who have higher factor loadings, because these respondents are more representative of that factor type. Thus weights were assigned

⁶See pp. 59-61.

to the respondents according to the following formula:⁷

$$W_j = \frac{r}{1 - r^2}$$

where W_j equals the weight of each respondent and r equals the factor loading of the respondent. Appendix I indicates the loadings and weights of each respondent included in each factor for each station. To arrive at the factor array, each respondent's original Q-sort score was multiplied by the appropriate weighting and the items were ranked from highest scoring to lowest scoring to represent the views of each factor. If the respondent's loading on a given factor was negative, then the raw Q-sort scores were reversed for that respondent. This was essential for the generation of the prototypical Q-sort. The nature of the negatively-loaded respondent was maintained and, simultaneously, the reversed scores then paralleled the positively-loaded respondents on that factor. The ranked items were then put back into the original Q-sort frequency distribution for for convenience in interpretation. Appendix J presents the prototypical Q-sorts which indicate the kind of Q-sort that a person with an extremely high loading on a factor might have provided. The fifty-six compartments contain statement numbers reflecting two of the eight television news qualities identified with a news

⁷William Stephenson, The Study of Behavior: Q-Technique and its Methodology (Chicago: The University of Chicago Press, 1953), p. 175.

image. Each of these factor arrays thus presents an average model of each factor identified for each station. Finally, a list of factor scores is found in Appendix L. It provides a comparison of the ranking of each Q-sort item on each factor for each station and is used for factor interpretation purposes.

Interpretation of Q-Data

Since the first factor for each of the five stations accounted for more of the total variance than any of the other factors combined, they were considered the most significant in terms of this study's objectives. This is reinforced by the highly significant intercorrelations of the respondents who loaded on each of the first factors for each station. Consequently, it may be concluded that this study identified one strong, highly reliable image for each of the five experimental conditions; a series of weaker, more tentative images for each experimental condition was also identified.

Three sources of information were used to interpret the nature of each factor image for each station: (1) the prototypical Q-sorts, i.e., factor arrays, were analyzed for indications of the needs, wants and attitudes of the people who hold a particular news image; (2) the factor scores were compared and contrasted for items within a factor and between factors. Items which tended to cluster indicated similarities, pointing to areas of

consensus or agreement among the factor types. Items which appeared at differing points between the factors indicated the uniqueness of each image. The larger the factor score difference for each item, the more meaningful the differentiation of one factor from another. Finally, (3) data from respondent interviews were analyzed to either confirm an interpretation generated from the first two sources of information or to broaden the interpretation. It is possible that a respondent may verbalize a particular preference or rejection for a television news characteristic only as a defense mechanism; this phenomenon should be considered in explaining the factors. The prototypical Q-sorts for the first factors of each station follow the individual interpretations.

Station #1--Factor #1--WBRZ-TV

As mentioned above, this factor was considered the strongest of any image identified for this station's news programming. It accounted for 31.2 per cent of the total variance, nearly four and a half times more variance than the second strongest factor. An examination of the prototypical Q-sort for this factor image reveals a clustering of news element #3 at the preferential end of the continuum and a clustering of news element #8 at the negative end

of the continuum.⁸ Since items containing the "live" news element reference also appear towards the negative end when coupled with the non-professional element, it may be concluded that this image group has a stronger aversion for non-professional programming than it has a preference for "live" programming. If these viewers were given a forced choice, perhaps they would accept a filmed format more readily than they would a non-professional presentation. This is given some support by the lack of clustering for item #7, "filmed" format. Items with this element appear in both extreme columns of the continuum. Item #1, "objective" reporting also appears to be a preferential news quality for this image group, although the clustering does not skew towards the extreme columns as it does for item #3. The preference for objective reporting is given some support by the somewhat looser tendency for its opposite quality, interpretative reporting, item #5, to appear towards the middle and lower end of the continuum. The viewers who hold this news image for station #1 do not seem to be characterized by any singular characteristic. Respondents who loaded significantly on this factor are heterogeneous in age, sex, race, income and education. However, the data do suggest that a great majority of the

⁸A listing of the eight news elements which comprise the Q-sort statements is found in Table V, pp. 112-113.

viewers in this image factor have at least some college and are caucasian; all of the viewers watch national and local news at least some of the time. It is interesting that viewer #13 loaded negatively on this factor and also correlated negatively with the other viewers who characterize this factor image. Examination of this respondent's individual Q-sort shows that there is an image of station #1 which contradicts the remainder of this factor's viewers. The respondent commented to the interviewer that "Cahnnel 2 hardly ever has any technical difficulties" and the "News is easy to understand." Since the questionnaire data do not sufficiently identify the uniqueness which sets this respondent apart from the others, other psychological and attitude tests should be used to better understand teh nature of the respondents who correlate negatively with this factor image.

Station #2--Factor #1--WAFB-TV

Accounting for one-third of the total variance (33.4 per cent), this was again the strongest image factor identified for this station. It is clear that people who compose this group of viewers tend to view Station #2 in a similar way as do the viewers who were identified for the first factor of Station #1. There is a clustering effect of item #3 ("live" programming) at the positive end of the continuum and another clustering of item #8 (non-professional programming) at the negative end. Thus

STATION #1

FACTOR #1

STATION #1

FACTOR

				7,1						
			8,6	6,5	7,5					
			8,3	6,1	6,7					
		8,4	7,6	5,3	5,1	7,2				
		8,2	6,2	4,6	3,6	6,3				
LOW	8,5	7,8	5,8	4,2	2,4	4,7	7,4	HIGH		
	8,1	6,4	5,7	3,5	2,1	4,5	4,1			
	5,6	4,8	5,4	2,7	1,7	3,1	3,7			
	8,7	5,2	2,8	3,8	2,5	1,6	1,4		3,4	7,3
	6,8	4,3	1,8	2,6	1,3	1,5	1,2		3,2	2,3
1	2	3	4	5	6	7	8	9		

it may be concluded that this group of viewers tends to perceive the news on Station #2, i.e., channel 9, as having a "live" or immediate quality, while at the same time, not having a non-professional quality. Again, this latter interpretation is supported by another clustering effect of item #4 (professional) at the positive end of the continuum. Since both primary clustering effects are identical for the strongest factors on the first two stations, an examination was made for a respondent carry-over effect. Ten of the eighteen respondents who loaded significantly on the second station's primary factor also appeared on the first station's primary factor. This would tend to account for the similar clustering effects. But it is curious that the remaining 37.5 per cent of this factor's respondents were unique to the second station. If the two images are similar for nearly two-thirds of the respondents, then there must be certain variables in operation which set the two stations' images apart for the remaining one-third. Perhaps these variables lie within the nature of the respondents and can be identified by further psychological and attitudinal testing. The fact that two statements containing item #4 characteristics appear at the extreme positive end of the continuum and two statements containing item #8 characteristics appear at the extreme negative end of the continuum reinforces the interpretation that this group of viewers perceive Station #2's news as containing professional

qualities while lacking non-professional qualities. A clustering of news characteristic #5 towards the middle of the continuum (interpretative reporting) may indicate a tendency to view this station's news as partially interpretative in nature. The original instruction to place a statement in the middle columns if the respondent did not feel as strongly about it as towards the others seems to support this possibility. Conversely, there is another clustering of item #1 (objective reporting) which skews toward the positive end of the continuum. This seems to indicate that while there is an element of interpretative reporting in this news image, there is also a more definite element of objective reporting. No other news element appears to cluster in a meaningful way for this image. Examination of questionnaire data for the respondents who loaded significantly on this factor reveals no homogeneity for any of the viewer characteristics. Consequently, it appears that this image is held by viewers of varied demographic and behavioral characteristics.

Station #3--Factor #1--WRBT-TV

This factor was not especially strong, accounting for 22.7 per cent of the variance, about half of the variance accounted for by the first factors of stations #1 and #2. However, it was more than twice as significant as the second factor of this station (10.1 per cent variance).

STATION #3

FACTOR #1

STATION #3

FACTOR

				7,5					
			8,1	8,5	5,4				
			8,3	5,2	1,6				
		5,6	7,6	6,5	2,4	4,2			
		4,8	8,6	3,6	5,3	1,7			
	1,3	3,8	6,7	2,5	2,1	5,1	7,1		
	1,8	8,2	6,3	4,3	4,5	3,2	3,1		
	6,8	6,1	6,2	1,4	3,5	1,5	7,4		
7,8	2,8	2,6	6,4	5,7	1,2	2,3	3,7	7,3	
8,7	5,8	8,4	4,6	2,7	7,2	4,7	3,4	4,1	
1	2	3	4	5	6	7	8	9	

LOW

HIGH

Once again, there seems to be a clear tendency for the viewers in this image category to perceive station #3 in a similar perspective, i.e., possessing the quality of a live presentation (item #3) and not having the quality of non-professional programming (item #8). These viewers also seem to view this station's news as being filmed (item #7), although it is interesting the way these qualities tend to pervade the factor. Both statements #78 and #87 appear at the extreme low end of the continuum, indicating a tendency to perceive this station's filmed news as being professional. This is reinforced by the presence of statements #74 and #47 toward the positive end of the continuum. Since the latter statements are not as extreme as the former ones, it may be concluded that this group of viewers perceives this station's filmed news as both professional and non-professional, but with a tendency to reflect more of the latter category.

Reporter Class B also is a strong characteristic of the negative end of the continuum. That is, it appears the viewers in this image category perceive Station #3 as either not employing reporters who are female, black and young or not having a management philosophy which would hire these types of reporters. But this characteristic (item #6) does not cluster at the extreme negative end of the continuum; therefore it appears that while this is a characteristic of this viewer group, it is comparatively moderate. Finally, interpretative reporting appears to

characterize this image group, but again in an extremely moderate vein. This quality (item #5) clusters toward the middle of the continuum, indicating a mild perception of interpretative reporting for this station's news. Since the ten respondents who loaded significantly on this factor were of varied characteristics as judged by the questionnaire, it does not appear that any one group of individuals holds this image of station #3; it seems to be a heterogeneous image classification.

Station #4--Factor #1--Ideal

This was the strongest factor that was discovered for any of the stations; it accounted for 51.1 per cent of the total variance. The overwhelming characteristic of this factor is its intense aversion for non-professional news programming of any reporter classification or of objective or interpretative reporting. In effect, it seems that viewers who hold this image for station #4 want the news programmed well, regardless of who presents it or how it is presented. This is reinforced by the presence of a desire for professional reporting (item #4) to skew towards the positive end of the continuum. But, since items #48 and 84 appear at the negative end of the continuum, it may be concluded that this image group holds a stronger aversion for non-professional news programming than it does a desire for professional news presentations. There is also a tendency for this group

STATION #4

FACTOR #1

				6,3				
			8,3	5,2	2,7			
			5,6	6,4	5,4			
		2,8	4,6	6,2	5,3	3,1		
		4,8	1,8	7,5	2,5	4,5		
	7,8	5,8	6,7	1,4	1,7	3,2	2,3	
	8,7	3,8	6,5	3,6	5,1	2,4	4,7	
	8,5	2,6	1,3	3,5	2,1	1,6	3,7	
8,6	6,8	8,2	7,6	7,1	1,5	4,2	7,3	3,4
8,1	8,4	4,3	6,1	7,2	5,7	1,2	7,4	4,1
1	2	3	4	5	6	7	8	9

LOW

HIGH

to hold a positive orientation towards either live or filmed news, again, presumably if it is presented in a professional manner. Finally, there is a clustering of item #5 (interpretative reporting) at the center of the continuum, indicating this group holds no particular preference or aversion for their ideal news station to program in this way. An examination of the questionnaire data for those respondents who loaded insignificantly on this factor reveals a heterogeneous make-up for these viewers.

Station #5--Factor #1--Average

This is a comparatively weak first factor of the five stations, accounting for 24.2 per cent of the total variance. There appears to be no decisive groupings for this image category, other than a clustering of item #8 (non-professional) at the negative end of the continuum. Like the first factor for station #3, there seems to be a definite aversion for non-professional filmed reporting as judged by the presence of statements #87 and 78 in the extreme column of the continuum. At the preferential end, a slight clustering of item #3 indicates a tendency to perceive an average station's news as being live, although there is a similar tendency to view filmed programming as characteristic of an average station's news. Item #2 (reporter class A) seems to skew toward the positive end of the continuum, suggesting an image of white, mature, male reporters to characterize an average

news operation. Objective reporting seems to mildly characterize this factor, as indicated by a skewing of item #1 towards the positive end of the continuum. Its opposite, interpretative reporting, seems to cluster in the middle of the continuum, suggesting an average news image characterized by the presence of a moderate amount of interpretative reporting, but not as much as objective reporting. The type of person who holds this particular image of an average news operation does not fall into any particular demographic or behavioral grouping, as judged by the nature of the questionnaire data for the respondents who loaded significantly on this factor.

A Note on the Remaining Factors

Although factor analysis of the correlation coefficients yielded a series of factors for each station, as mentioned earlier in this chapter, only the first factors can be regarded with certainty. The remaining factors each accounted for only a small amount of the variance. In most cases, only a few respondents loaded significantly on each factor and the correlations were generally lower than the correlations on the first factor. Consequently, each of the remaining factors will be examined for general trends toward describing a station image; in-depth analyses are not warranted with the existing data.

Examination of the remaining factors for each station was based upon Table X. Each prototypical Q-sort

TABLE X

Station #1

Factor #1

Var. = 31.26%

ITEMS

COLUMNS

1-3

4-6

7-9

1

14

56

28

2

21

35

50

3

7

42

50

4

35

28

35

5

21

70

7

6

21

70

7

7

14

50

35

8

70

28

0

Factor #2

Var. = 7.3%

ITEMS

COLUMNS

1-3

4-6

7-9

1

42

42

14

2

21

42

35

3

14

56

28

4

42

35

21

5

14

28

56

6

21

70

7

7

14

56

28

8

28

56

14

Factor #3

Var. = 6.6%

ITEMS

COLUMNS

1-3

4-6

7-9

1

7

56

35

2

14

56

28

3

7

56

35

4

14

42

42

5

35

50

14

6

35

56

7

7

28

28

42

8

56

42

0

Factor #4

Var. = 6.5%

ITEMS

COLUMNS

1-3

4-6

7-9

1

7

63

2

21

35

3

21

50

4

21

50

5

21

56

6

56

42

7

14

28

8

63

Factor #5

Var. = 5.3%

ITEMS

COLUMNS

1-3

4-6

7-9

1

7

70

21

2

28

56

14

3

21

42

35

4

28

35

35

5

7

56

35

6

21

21

56

7

42

50

7

8

42

42

14

Factor #6

Var. = 4.6%

ITEMS

COLUMNS

1-3

4-6

7-9

1

28

56

14

2

7

50

42

3

35

35

28

4

7

63

28

5

42

35

21

6

42

21

35

7

21

63

14

8

14

64

21

TABLE X (continued)

Station #1 (continued)

Factor #7			
ITEMS	Var. = 3.5%		
	COLUMNS		
	1-3	4-6	7-9
1	21	50	28
2	21	50	28
3	21	42	35
4	28	50	21
5	21	50	28
6	21	56	21
7	14	42	42
8	42	50	7

Factor #8			
ITEMS	Var. = 3.4%		
	COLUMNS		
	1-3	4-6	7-9
1	42	21	35
2	14	56	28
3	21	35	42
4	21	63	14
5	21	56	21
6	21	56	21
7	42	35	21
8	14	70	14

Station #2

Factor #1			
ITEMS	Var. = 33.4%		
	COLUMNS		
	1-3	4-6	7-9
1	14	56	28
2	14	50	35
3	7	50	42
4	7	42	50
5	21	70	7
6	50	50	0
7	28	35	35
8	56	42	0

Factor #2			
ITEMS	Var. = 9.0%		
	COLUMNS		
	1-3	4-6	7-9
1	14	56	28
2	7	42	50
3	14	42	42
4	14	56	28
5	56	35	7
6	35	50	14
7	21	56	21
8	21	50	28

Factor #3			
ITEMS	Var. = 5.9%		
	COLUMNS		
	1-3	4-6	7-9
1	21	35	21
2	21	42	35
3	21	56	21
4	42	35	21
5	35	50	14
6	21	63	14
7	28	56	14
8	7	56	35

TABLE X (continued)

Station #2 (continued)

Factor #4				Factor #6				Factor #7			
ITEMS	Var. = 5.7%			ITEMS	Var. = 4.7%			ITEMS	Var. = 3.9%		
	COLUMNS				COLUMNS				COLUMNS		
	1-3	4-6	7-9		1-3	4-6	7-9		1-3	4-6	7-9
1	28	63	7	1	28	63	7	1	28	63	7
2	28	56	14	2	56	21	21	2	42	21	35
3	0	50	50	3	42	35	21	3	42	35	21
4	35	35	28	4	28	50	21	4	28	50	21
5	28	56	35	5	14	63	21	5	14	63	21
6	21	50	28	6	7	42	50	6	7	42	50
7	21	42	35	7	21	50	28	7	14	42	42
8	21	35	42	8	0	70	28	8	0	70	28

Factor #8				<u>Station #3</u> Factor #1				Factor #2			
ITEMS	Var. = 3.2%			ITEMS	Var. = 22.7%			ITEMS	Var. = 10.1%		
	COLUMNS				COLUMNS				COLUMNS		
	1-3	4-6	7-9		1-3	4-6	7-9		1-3	4-6	7-9
1	7	63	28	1	21	35	42	1	35	42	21
2	28	28	42	2	21	56	21	2	28	70	0
3	28	21	50	3	7	42	50	3	35	35	28
4	14	56	28	4	14	50	35	4	21	63	21
5	35	42	21	5	14	70	14	5	7	35	50
6	42	50	7	6	28	70	0	6	14	50	35
7	7	70	21	7	14	42	42	7	21	50	28
8	35	63	0	8	70	0	0	8	28	50	21

TABLE X (continued)

Station #3 (continued)

Factor #3				Factor #4				Factor #5			
ITEMS	Var. = 6.8%			ITEMS	Var. = 6.1%			ITEMS	Var. = 5.1%		
	COLUMNS				COLUMNS				COLUMNS		
	1-3	4-6	7-9		1-3	4-6	7-9		1-3	4-6	7-9
1	21	56	21		14	56	28	1	14	50	35
2	21	63	14		35	50	14	2	28	50	21
3	28	50	21		35	50	14	3	21	42	35
4	28	35	35		28	35	35	4	28	42	28
5	7	50	42		0	42	56	5	42	56	0
6	7	56	35		35	35	28	6	14	63	21
7	35	35	28		28	50	21	7	21	35	42
8	35	50	14		14	63	21	8	21	56	21

Factor #6				Factor #7				Factor #8			
ITEMS	Var. = 4.8%			ITEMS	Var. = 4.7%			ITEMS	Var. = 4.0%		
	COLUMNS				COLUMNS				COLUMNS		
	1-3	4-6	7-9		1-3	4-6	7-9		1-3	4-6	7-9
1	35	42	21	1	35	56	7	1	21	42	35
2	35	42	21	2	21	63	14	2	14	56	28
3	7	56	35	3	28	42	28	3	14	42	42
4	7	50	42	4	50	42	14	4	7	50	42
5	21	50	28	5	35	42	21	5	28	42	28
6	35	28	35	6	7	63	28	6	35	63	0
7	28	56	14	7	21	28	50	7	21	56	21
8	21	70	7	8	14	50	35	8	56	42	0

TABLE X (continued)

Station #3 (continued)

Factor #9			
ITEMS	Var. = 3.9%		
	COLUMNS		
	1-3	4-6	7-9
1	14	56	28
2	14	50	35
3	56	14	28
4	28	70	0
5	14	50	35
6	28	50	21
7	14	50	35
8	28	50	21

Factor #10			
ITEMS	Var. = 3.5%		
	COLUMNS		
	1-3	4-6	7-9
1	42	50	7
2	35	35	28
3	28	42	28
4	28	42	28
5	14	50	35
6	0	70	28
7	14	42	42
8	28	50	21

Station #4 Factor #1			
ITEMS	Var. = 51.1%		
	COLUMNS		
	1-3	4-6	7-9
1	7	63	28
2	21	35	42
3	14	42	42
4	21	28	50
5	14	77	7
6	21	70	7
7	14	56	28
8	84	14	0

Factor #2			
ITEMS	Var. = 5.4%		
	COLUMNS		
	1-3	4-6	7-9
1	28	50	21
2	28	50	21
3	14	50	35
4	21	63	14
5	21	50	28
6	28	42	28
7	28	42	28
8	28	56	14

Factor #3			
ITEMS	Var. = 4.7%		
	COLUMNS		
	1-3	4-6	7-9
1	21	42	35
2	21	35	42
3	7	56	35
4	7	42	50
5	21	77	0
6	21	70	7
7	21	42	35
8	77	21	0

Factor #4			
ITEMS	Var. = 4.1%		
	COLUMNS		
	1-3	4-6	7-9
1	7	70	21
2	14	50	35
3	21	35	42
4	14	35	50
5	21	63	14
6	14	70	14
7	21	50	35
8	77	21	0

TABLE X (continued)

Station #4 (continued)

Factor #5			
ITEMS	Var. = 3.3%		
	COLUMNS		
	1-3	4-6	7-9
1	14	42	42
2	21	56	21
3	21	56	21
4	21	21	56
5	21	63	14
6	28	50	21
7	21	56	21
8	50	50	0

Station #5
Factor #1

Var. = 24.2%			
ITEMS	COLUMNS		
	1-3	4-6	7-9
1	7	42	50
2	28	50	21
3	0	50	21
4	14	50	42
5	14	84	0
6	35	56	7
7	14	42	42
8	77	21	0

Factor #2

Var. = 11.3%			
ITEMS	COLUMNS		
	1-3	4-6	7-9
1	21	63	14
2	28	50	28
3	42	28	28
4	7	42	50
5	21	28	50
6	14	56	28
7	35	56	7
8	28	70	0

Factor #3

Var. = 6.9%			
ITEMS	COLUMNS		
	1-3	4-6	7-9
1	14	50	42
2	35	35	28
3	42	56	0
4	14	56	28
5	28	42	28
6	35	35	28
7	14	70	14
8	14	50	35

Factor #4

Var. = 5.7%			
ITEMS	COLUMNS		
	1-3	4-6	7-9
1	21	70	7
2	28	63	7
3	28	50	21
4	14	63	21
5	28	42	28
6	21	21	56
7	28	56	35
8	28	35	35

Factor #5

Var. = 5.1%			
ITEMS	COLUMNS		
	1-3	4-6	7-9
1	28	56	14
2	21	42	35
3	28	42	28
4	35	14	50
5	0	84	14
6	21	56	21
7	35	50	14
8	28	50	21

TABLE X (continued)

Station #5 (continued)

Factor #6				Factor #8				Factor #10			
ITEMS	Var. - 4.8%			ITEMS	Var. = 3.8%			ITEMS	Var. = 3.4%		
	COLUMNS				COLUMNS				COLUMNS		
	1-3	4-6	7-9		1-3	4-6	7-9		1-3	4-6	7-9
1	21	50	28	1	21	50	28	1	35	50	14
2	0	77	21	2	42	42	14	2	28	56	14
3	42	35	21	3	7	63	28	3	7	42	50
4	28	56	14	4	21	35	42	4	14	42	42
5	42	35	21	5	35	50	14	5	35	42	21
6	21	35	42	6	35	50	14	6	50	35	14
7	21	56	21	7	14	50	35	7	35	42	21
8	21	50	28	8	21	56	21	8	7	77	14

was grouped into its first three columns at the lower end of the continuum, its middle three columns and its three columns at the high end of the continuum. Since there were fourteen Q-sort statements containing each of the eight news characteristics, any group which contained eight or more of the news descriptions was used for interpretation purposes. That is, if a division of three or more columns contained more than half of the statements reflecting a particular news element, then that element was used to define the nature of the news image for that factor. Simon used a variation of this procedure in a similar study.⁹ Other, more scattered groupings were also used for interpretation purposes, if they seemed to describe a tendency.

In Station #1, factor #2 seems to be characterized by an image of interpretative reporting. The qualities of live, filmed and non-professional appear to cluster in the middle grouping of the continuum, indicating a moderate tendency to view the station's news in this way. Factor #3 is similar to the first factor in that these viewers apparently do not perceive this station as non-professional; however, this tendency does not seem to be as strong since the clustering is more diverse. There

⁹Simon, (unpublished Master's thesis, Department of Communications and Behavioral Sciences, The Ohio State University, 1969). A majority of the respondents loading significantly on a factor must have ranked a Q-sort item in either the three highest columns or in the three lowest columns for inclusion in that factor's description.

also appears to be a very mild tendency to perceive this station's news as live and objective with equal tendencies to perceive the station's news philosophy as employing representatives of both Reporter Class A and Reporter Class B. Factor #4 seems to be characterized by a perception of the news as not being filmed. There is also a somewhat mild tendency to perceive the news as interpretative and a slightly stronger tendency to see the news as objective, but not non-professional. Factor #5 appears to be characterized by a strong, moderate tendency to view this station's news as objective and with using reporters who are female, black and young. There are no definite tendencies in either extreme column grouping for factor #6, but there appears to be moderately strong perceptions of the news as objective, professional and filmed. Viewers in factor #7 seem to perceive this station's news only as being characterized by young, black and female reporters, while factor #8 is characterized only by a moderately strong perception of the news as non-professional, which is counter-balanced by a more moderate image of the news as professional.

Viewers in the second factor of station #2 seem to have no strong perceptions of the news according to the data. There is a slight tendency not to perceive the news as interpretative and slight tendencies to perceive the news as objective, professional and filmed. The strongest

perceptions of the news in the third factor group appear as clusters in the middle columns of the continuum.

Reporter class B seems to moderately characterize this viewer image with slightly weaker, but equal perceptions of the news as being both live and filmed as well as being somewhat non-professional. Factor #4 seems to be characterized by a firm, moderate tendency to perceive the news as objective with weaker tendencies toward Reporter Class A and interpretative reporting. Reporter Class A tends to cluster toward the negative end of the continuum for factor #6, indicating the viewers in this image category do not perceive this station as hiring white, male, mature reporters. Objective and interpretative reporting appear to share equal emphasis in this image category. The focal point of factor #7 appears to be a definite tendency to perceive the news as non-professional, although it is not an extreme tendency. Like the sixth factor, these viewers also seem to perceive the news as sharing equal emphasis on objective and interpretative reporting. Factor #8 has no clear tendency towards describing this station either positively or negatively. But there is a suggested perception of the news as both objective and filmed and a moderate orientation towards non-professionalism.

Factor #2 of Station #3 seems to have as its strongest image characteristic, a moderate, but definite tendency to perceive the news reporters as white, male and

mature; these reporters also appear to be viewed as professionals as is the news programming of this station in general. Factor #3 is difficult to interpret with the existing data. Like the second factor, there is a moderate tendency to perceive the reporters as white, male and mature. But there is also a slightly weaker perception of the reporters in the opposite category. The quality of objectivity also seems to have a moderate position in this image factor. The fourth factor is also difficult to interpret with the existing data. Although there is a moderate tendency to perceive the news as non-professional, there is also a moderate perception of the news as objective. Factor #5 has a definite clustering of item #5, interpretative reporting, toward the negative end of the continuum, although a slight majority is included within the middle columns division. Reporter Class B also seems to moderately characterize this factor as does the quality of non-professional reporting.

The viewers who comprise the sixth factor in this image category seem to share the perception of non-professional reporting with the viewers in the fifth factor image; but the viewers in the sixth factor appear to be more definite toward this news characteristic with 70 per cent of the non-professional statements clustering in the middle columns as compared with 56 per cent for the fifth factor. The qualities of live programming and

filmed reporting are weak, but equally shared by these viewers. The main thrust of factor #7 is a definite tendency to view this station as employing black, young, female reporters, although this tendency is not extreme. Conversely, there is also a weaker tendency to view this station's news as employing reporters who are mature, white males. Objective reporting seems to be a moderate quality of this image factor, although there is a tendency for it to be perceived as not characterizing this station's news. Factor #8 can be described by the clustering of non-professional reporting and Reporter Class B towards the negative end of the continuum; these viewers apparently do not perceive these qualities as characteristic of the news programming on Station #3. But Item #2, Reporter Class A, does seem to moderately describe this image factor. Objective reporting appears to skew negatively for Factor #9, although it is not strongly defined. There is a stronger tendency, perhaps, for these viewers to not perceive this station's news as live and a very moderate tendency for the news to be viewed as objective. Finally, item #6 on factor #10 is the only one which seems to describe this image factor. Viewers who subscribe to this image perceive this station's news as philosophy consistent with employing young, black, female reporters.

Factor analysis for the ideal news station, #4, isolated five factors, the fewest of any of the experi-

mental conditions. Factor #2 is perhaps best characterized by items #4 and #8 clustering toward the middle of the continuum. The data do not identify an extreme image held by these viewers, but they do seem to perceive this station's news as being a combination of both professional and non-professional. Factor #3 is similar to factor #1 in that both are characterized by an extremely strong negative reaction to non-professional reporting. The third factor also has a tendency to have a definite, but moderate aversion to interpretative reporting for an ideal station (item #5). There is also a moderate tendency to prefer live news programming and an apparent negative reaction to reporters who are black, female and young. Again, viewers in the fourth factor have a strong aversion to non-professional news programming on their ideal station and a definite preference for objective reporting. There are mixed reactions to interpretative reporting and reporters who are black, female and young, but the tendency seems to lean toward a non-preference for these news characteristics. The fifth factor for station #4 does not appear to have as strong an aversion for non-professional programming as do the previous factors, although there is a skewing for this item toward the negative end of the continuum. But viewers in this factor do seem to hold more of a preference for professional news programming, more of a preference for

filmed reporting than live reporting and a somewhat weaker preference for objective reporting than for interpretative reporting.

The second factor for station #5 is best defined by a clustering of objective reporting towards the center of the continuum with about equal, smaller clusterings at either end. Consequently, this group of viewers tends to perceive their average news operation as particularly characterized by objective reporting, but not completely lacking in this quality either. There is also a definite skewing of non-professional reporting toward the negative end of the continuum, although it is not nearly as strong as in factor #1. This average news operation is also moderately perceived as not having filmed reporting, but also as having, at times, reporters who are black, female and young. The focal point of factor #3 seems to be in item #7, interpretative reporting. Since there is a definite clustering of this characteristic in the middle of the continuum, these viewers appear to perceive the average news program as somewhat possessing this characteristic. Live reporting seems to not represent this image, but there is a slight tendency to perceive the average news program as being professional. Viewers who are included in factor #4 of station #5 seem to perceive the average news as having a moderate amount of filmed programming. It is also perceived as being slightly professional, moderately

objective and as having some reporters who fall into Reporter Class A, i.e., who are male, caucasian and mature. Interpretative reporting seems to strongly characterize factor #5, since none of the statements containing this quality were present at the negative end of the continuum. Objective reporting and reporters in Reporter Class B also seem to characterize this factor, but much more tentatively. Factor #6 also seems to have a strong news quality; people in this category seem to perceive an average news operation as being characterized by Reporter Class B, i.e., male, caucasian reporters who are mature. Professional reporting and filmed reporting may also describe the nature of this viewer image. There are no strong images in the data for Factor #8, although it can be said with reasonable assurance that this image is characterized by live reporting. Non-professional reporting may be an element in the nature of this viewer image, although it is weakly defined in the data. Finally, factor #10 is strongly represented by a definite clustering of item #8, non-professional reporting, in the middle columns of the continuum. These viewers, then, may perceive the average news operation to be moderately characterized by this news quality. It may also be describes as possessing a very moderate tendency to include mature, male, caucasian reporters within the image spectrum.

Appendices J and K and Table X may also be examined to determine the relationship of the first three station's news to an hypothesized ideal and average news operation. Again, since the first factors of each of the stations were found to be the most statistically significant, these were compared and contrasted to each other. Station #1 appears to closely approximate an ideal news operation in that neither are characterized by non-professional reporting. However, the ideal news operation seems to have a more intense aversion for this quality than is present in the news programming for station #1. The remainder of the qualities appear to be almost identical between the two stations, although there are differences in degree. For example, the ideal news program seems to be characterized by a larger amount of professionalism than is the news programming on station #1. The average news operation, on the other hand, appears to be characterized by slightly more non-professionalism, more of a tendency to exclude black, young and female reporters and more of a tendency to have live news reporting than is station #1.

The live news programming on station #2 is clearly more non-professional than a perceived ideal news operation. An ideal news program also apparently includes more filmed programming than does station #2 and it also has a tendency to employ more black, young and female reporters. An ideal news program is also perceived as having a more objective news presentation than is the news on station #2.

The data does not seem to differentiate the two news operations on the basis of the other news qualities, i.e., they are similar or identical in image perception on the basis of these qualities. An average news operation appears to have a little less interpretative reporting than does station #2, and it is also slightly more non-professional. Conversely, an average news operation seems to be perceived as being more objective than the news on station #2. Finally, the image of station #2 appears to be one of employing fewer reporters who are black, female and young than does an average news station.

A comparison of the news image of station #3 to an ideal news operation reveals that the ideal station could have news with a higher degree of objectivity than its counterpart. There is also a slight tendency for station #3 to have a lower professionalism denominator and a much higher non-professionalism quality than the ideal news station. Station #3 also seems to have a higher filmed news image, but less of a tendency to employ female, black and young reporters than does the ideal news station. When compared to an average news station, station #3 seems to have slightly less objective reporting, but more interpretative reporting. Station #3 also seems to hold an image of employing fewer black, female and young reporters than does the average news station. Both news images are similar when the remaining news qualities are compared, and identical in the amount of filmed news

each station broadcasts. It is noteworthy that both the average news station and the news on station #3 are perceived as having approximately equal images of non-professionalism.

The ideal and average news operations apparently are perceived in a similar manner in all respects. There does seem to be a slight tendency for the ideal station's news to be perceived as being less objective and as being less of a live presentation. The ideal station is also perceived as employing more black, young and female reporters than the average station's news together with more caucasian, male and mature reporters. Both news stations seem to have an image of possessing little non-professionalism, although there is a slightly higher aversion to this in the ideal news operation. Conversely, the average news operation appears to have a weak tendency to be perceived as being more professional than the ideal news station.

The first three television news station images may also be compared and contrasted with each other. For instance, the news on station #1 is identical to station #3 in that both have a strong lack of non-professionalism associated with their news images. The news on station #2, however, appears to be perceived as being more non-professional than its two counterparts. There also seems to be less filmed news in the news image of station #2, although the "live" quality appears to be identical in

intensity across all three stations. Station #1 appears to possess a stronger image of employing male, mature, caucasian reporters in its news programming than the other two stations; station #2 ranks second in this category. The same order of image intensity for item #6, Reporter Class B, is retained for each station. In effect, station #1 seems to be perceived as employing more black, female, young reporters than its two counterparts. Again, station #2 ranks second. Both the first and second stations' news has an image of being moderately, but equally objective. In comparison, station #3 has a tendency to be perceived as objective in its news reporting, but not as much as its two counterparts. The remainder of the news qualities are apparently perceived similarly for the three news stations according to the data.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Five questions were formulated in Chapter I¹ with regard to this study's objectives. The data derived from the investigation allows the following conclusions to be drawn:

1. What are the existing images of the television news operations of the three commercial, Baton Rouge stations?

It is apparent that each of the stations possesses groups of viewers, each with an individualized image of that station's news. For WBRZ-TV, Channel 2, eight image groupings were identified; eight image groupings for WAFB-TV, Channel 9 were also identified; and ten image groupings for WRBT-TV, Channel 33 were identified. However, the first image group was the most statistically significant for each station; consequently, it was used as the primary description of a station's news image. The remaining image groupings were highly tentative and their validity questionable. Confirmation of their ex-

¹See p. 45.

istence and further delineation of their nature will require additional research and experimentation.

A. Viewer News Image: WBRZ-TV

The typical viewer who holds this image perceives the news on Channel 2 as projecting a "live," spontaneous, unrehearsed format. This viewer also believes that this station's news is of a professional quality, although there is a tendency to perceive the news occasionally as non-professional, i.e., as occasionally making technical errors and/or as employing reporters who are not totally dedicated to their work. These viewers also perceive this station's news as being a mixture of objective and interpretative reporting, although there is a slightly higher tendency toward the latter quality. Finally, there is also a mixed perception of the type of reporter which may be found on this station's news. The viewers perceive the station as employing both reporter Class "A," i.e., male, caucasian and mature reporters as well as reporter Class "B," i.e., female, black and young reporters. Again, there seems to be a higher tendency toward perceiving the reporters as members of the latter group.

B. Viewer News Image: WAFB-TV

The typical viewer tends to perceive this station's news as possessing only a moderate degree of professionalism. Consequently, there is a tendency to perceive this

station's news as mistake-prone and its reporters as not having total dedication to the job. These viewers also believe that the station management's philosophy does not allow for the hiring of minority reporters. If it does, it apparently is due to community or governmental pressure. There is a moderate amount of objectivity associated with this station's news, although there seems to be a higher tendency to perceive interpretative reporting over objectivity. Finally, these viewers tend to perceive a mixture of "live" and filmed formats for this station's news programming.

C. Viewer News Image: WRBT-TV

The outstanding characteristic of this station's news image is its quality of interpretative news reporting. That is, the typical viewer who holds thi image perceives the news as opinionated. The typical viewer's perception of this station's news also seems to be mixed with regard to "live" and filmed programming, although there is a stronger tendency to perceive it as filmed. The data also appear to indicate that the filmed news presentation is perceived as being presented in a professional manner. There also seems to be a mixed image of this station's news employing both male, caucasian and mature reporters together with female, black and young reporters with a slightly stronger tendency towards the latter category.

2. What are the viewers' images of "average" television news operations?

The "average" television news image seems to be strongly characterized by a perception of interpretative reporting together with a more moderate image of objective reporting. It is interesting, too, that even an average news program is perceived as being of a professional nature, a quality which is an encouraging sign for the nature of news broadcasting in general. The average news operation is also perceived as using more caucasian, male and mature reporters than black, female and young reporters. There is also a mixed perception of both "live" and filmed reporting for an average station's format.

3. What are the viewers images of "ideal" television news operations?

It is clear that the typical viewer's image of an "ideal" news program is one which demands total professionalism. No matter who presents the news, it should be done in a way that allows for no technical errors. The reporters should also demonstrate total dedication to the job. There are also preferences for both objective and interpretative reporting, as long as news interpretation or editorializing is clearly distinguished from the factual, objective presentation.

4. How are the three commercial Baton Rouge news operations correlated with hypothesized "average" and "ideal" television news operations?

Examination of the data reveals that the news programming on each of the three Baton Rouge television stations has qualities which closely approximate both "average" and "ideal" news images; none of the stations' news can be said to be more highly correlated overall with the "average" and "ideal" news images than the other stations' news. For example, the news on WBRZ-TV is similar to an ideal news program in that both are perceived as being professional, although the ideal news program seems to be more strongly defined in this area. The average news operation appears to be less professional, have a lower "live" format perception and also tends to employ fewer black, young and female reporters than does WBRZ-TV. An ideal news program appears to be less professional than the news on WAFB-TV, although it is perceived as being more objective, using more film and employing more reporters in minority groups. The average news operation also appears to be more objective than the news on WAFB-TV and it is perceived as employing more minority reporters. Perhaps this latter image is responsible for the existing news operation to be more non-professional than an average news station. The ideal news image, when compared with the news image of WRBT-TV, is characterized by a higher degree of objectivity and professionalism, although the existing news station tends to be perceived as employing more minority group reporters. WRBT-TV appears to be

closest to the image of an average news operation in the category of non-professionalism. Both are perceived as having moderate, but approximately equal, degrees of this quality. A more detailed discussion of the nature of each station's news image and their relationships to each other is found in Chapter IV.²

5. What are the descriptive characteristics of each of the respondents who are discovered to characterize a particular image category?

The questionnaire data derived from the study does not adequately discriminate types of viewers who characterize particular image groupings. It may be conjectured that news images are either held by viewers, regardless of demographic characteristics or more sophisticated measurement techniques need to be used in order to isolate viewer types associated with particular images if such associations, in fact, exist.

Implications of Findings and Prospects for Future Study

The results of this study are encouraging, for they demonstrate the feasibility of Q-methodology as a tool for uncovering qualitative audience information according to the objectives of this study. It is hoped that these results will be useful to those persons who are directly involved with the television industry and to those

²See pp. 139-152.

persons who are directly involved with the television industry and to those persons who are indirectly involved. For the former classification of individuals, including station managers, sales managers, program and operations managers and news directors, the information concerning television audience news images generated in this study can be useful in television news decision-making. News programming can be geared towards reinforcing those aspects which are already favorably perceived by the viewers; it can also be oriented towards changing those dimensions which the data suggest are liabilities in achieving the goal of increased viewership. The results of this study do not necessarily indicate what specifically could be changed in the station's news format. These decisions will derive from combining the qualitative audience information suggested in this study with other information from other sources, i.e., other qualitative and quantitative studies. In this way, the probability will be minimized that large quantities of time and money will be lost and that careers will be jeopardized by questionable decision-making based upon inadequate or incorrect information. For the latter group of individuals, such as community leaders, those interested in serving the public's needs and interests and citizens who simply wish to be informed, news formats and content can be controlled to maximize the probability of reaching viewers in all demographic and behavioral classifications.

It is quite possible that selection of a different sample of respondents, a different sample of statements as Q-stimulii or different methods of analyzing the data would yield other typological structures and image perceptions. More rigorous experimental techniques may isolate more clearly defined and less overlapping viewer images. These techniques may take the form of adherence to more precise sampling procedures or additional computer treatment of the raw data. For instance, this study generated the maximum number of viewer image factors that the data would allow and still be significant. Consequently, the universe of potential viewers was scattered and all but the first factor of each station was poorly defined and could only be interpreted precariously. The data could be readministered for computer evaluation with a limit placed on the number of factors which could be isolated. This would then force the variance to be accounted for within a smaller spectrum, e.g., four factors for each station, and each would then be more significant and better defined than is currently the case. In this study, the author simply wanted to determine the number of viewer images which exist for each station, using the present sample of respondents, regardless of their degree of significance. Condensing the number of factors derived from the data would provide another indication of the nature of the potential news images in the audience. Administration

of attitude and opinion tests would also be useful in future research endeavors of this nature. The questionnaire used in this study proved too limited in its scope and did not discriminate viewer types with regard to corresponding viewer images. Or, as mentioned earlier in this chapter, it is possible that the viewers are, in fact, heterogeneous with respect to news images and that types of viewers do not cluster together according to the images they hold. Perhaps a more sophisticated questionnaire or completion of the semantic differential attitude scale³ or the repertory grid technique⁴ would provide valuable information in this area.

It would be interesting, too, to introduce other variables into the experimental situation. Perhaps viewers who watch the news in color instead of black and white would hold unique images of a station's news programming, even if all other variables are equal. Viewers in small cities or towns could be tested for unique images of the news on their single station outlet as compared with viewers in multi-outlet markets. Q-methodology could also be used to examine the news images of network broadcasts

³A thorough discussion of the semantic differential is found in Mowrer, O. Hobart, et. al., Psychotherapy: Theory and Research (New York: The Ronald Press Company, 1953), pp. 530-536.

⁴This technique is discussed and referenced in footnotes #43 and #44, p. 80 of this study.

as compared with local broadcasts. Finally, variables such as specific news personality references instead of sex, professional experience and race could be introduced into the stimulus situation together with such descriptions as type of news set construction and news broadcast time. Each may be hypothesized to affect viewer image of a station's news programming.

One major drawback of this study is the excessive length of time required to administer the five-station, Q-sort task to each respondent. This problem should be overcome in future research efforts. Perhaps one solution would be to establish a standard "average" and "ideal" news image criteria. Then the respondents would be required to perform the Q-sort only for the existing news stations in their market. Conclusions can then be drawn by comparing the data derived from a specific market area with the standard images already established for the hypothetical news stations. It seems that this would be a prerequisite for any commercial value which this procedure may have.

The writer does not suggest that there are neat "media niches" into which every human being has his place. No attempt has been made to categorize all human beings into identifiable news image pigeonholes. This is probably an impossible task, for each classification would necessarily be so broad as to render them useless. He does claim, however, that the fundamental stimulus materials were sensibly selected, that the data was gathered with care

and that the correlations and factor analysis were properly conducted. If viewers do fall into distinct image types, then those types had a high probability of emerging in this study. The results provide cause for some optimism that there are categories of television news images among viewers. The images identified in this study should help broadcasters and the public fully exploit the vast potential of television news. The writer hopes that this study's findings will contribute towards the achievement of this goal.

BIBLIOGRAPHY

Books

- Allport, G. W., Vernon, P. E., and Lindzey, G. Study of Values. Rev. ed. Boston: Houghton Mifflin, 1951.
- Block, Jack. The Q-Sort Method in Personality Assessment and Psychiatric Research. Springfield, Illinois: Charles C. Thomas, 1961.
- Bower, Robert T., Television and the Public. New York: Holt, Rinehart and Winston, 1973.
- Brown, Steven R. and Brenner, Donald J. (eds.). Science, Psychology, and Communication: Essays Honoring William Stephenson. New York: Teacher's College Press, 1972.
- Clevenger, Theodore, Jr. Audience Analysis. Indianapolis: Bobbs-Merrill Company, Inc., 1968.
- Edwards, Allen L. Statistical Methods for the Behavioral Sciences. New York: Holt, Rinehart and Winston, 1964.
- Fruchter, Benjamin. Introduction to Factor Analysis. Princeton: Van Nostrand, 1954.

- Gillmor, Donald M. and Barron, Jerome A. Mass Communication Law: Cases and Comment. ("West Publishing Company: American Casebook Series") St. Paul, Minnesota, 1950.
- Gleason, William A. (ed.) A Glossary of Radio and Television Terms. New York: Catholic Communications Foundation, Inc., 1971.
- Hilden, Arnold H. Manual for Q-Sort and Random Sets of Personal Concepts. Washington University, St. Louis, Missouri (by the author, 1954).
- Jennings, Ralph M. Guide to Understanding Broadcast License Applications and Other FCC Forms. New York: United Church of Christ, Office of Communication, 1972.
- Kelly, George, A. The Psychology of Personal Constructs. New York: W.W. Norton and Company: Vol. I, 1955.
- _____. A Theory of Personality: The Psychology of Personal Constructs. New York: W.W. Norton and Company, 1963.
- Kerlinger, Fred N. Foundations of Behavioral Research. 2d ed. New York: Holt, Rinehart and Winston, Inc., 1973.
- Lichty, Lawrence W. and Ripley, Joseph M. II. American Broadcasting: Introduction and Analysis: Readings. 2d ed. Madison, Wisconsin: College Printing and Publishing, Inc., 1970.

- Merton, Robert K., Fiske, Marjorie T. and Kendall, Patricia L. The Focused Interview: A Manual of Problems and Procedures. Glencoe, Illinois: Free Press, 1956.
- Mowrer, O. Hobart, et. al. Psychotherapy: Theory and Research. New York: The Ronald Press Company, 1953.
- Quaal, Ward L. and Martin, Leo A. Broadcast Management: Radio + Television. ("Studies in Media Management," A. William Bluem, Gen. Ed.). New York: Hastings House, Publishers, 1968.
- Skornia, Harry J. Television and Society: An Inquest and Agenda for Improvement. New York: McGraw-Hill Book Company, 1965.
- Standard Definitions of Broadcast Research Terms. A Guide Prepared by the Research Division of the National Association of Broadcasters, Washington, D.C., January, 1967.
- Steiner, Gary A. The People Look at TV. New York: Alfred A. Knopf, Inc., 1960.
- Stephenson, William. The Study of Behavior: Q-Technique and its Methodology. Chicago: The University of Chicago Press, 1953.
- _____. The Play Theory of Mass Communication. Chicago: The University of Chicago Press, 1967.

Thompson, George G., Gardner, Eric F. and Di Vesta, Francis J. Educational Psychology. New York: Appleton-Century-Crofts, Inc., 1959.

Articles, Journals, Legal Citations, Reports and Unpublished Materials

Anast, Philip. "Personality Determinants of Mass Media Preferences," Journalism Quarterly, 43 (Winter, 1966), pp. 729-32.

Bandura, Albert. "What TV Violence Can Do To Your Child," Look (October 22, 1963).

Blake, Richard A. "TV's Tyranny of the 12 Hundred," America (December 23, 1972), pp. 550-51.

Block, Jack. "A Comparison of Forced and Unforced Q-Sorting Procedures," Educational and Psychological Measurement, XVI (1956), pp. 481-493.

Cathcart, William L. "Viewer Needs and Desires in Television Newscasters," Journal of Broadcasting, XIV (Winter, 1969-70), pp. 55-62.

Cone, Fairfax M. "What's Bad for TV is Worse for Advertising," Fortune, (July, 1965).

"Don't Call Us . . ." Newsweek, 79 (June 26, 1972).

Finney, Robert G. "Do We Need Another TV Rating Study?" Educational Broadcasting Review, II (February, 1968).

- Flynn, James H. III. "The Ideal Television Station: A
"Q" Study," Journal of Broadcasting, XVI
(Winter, 1971-72).
- Fuller, Leslie. "News Doctors: Taking Over TV Journalism?"
Broadcasting, 87 (September 9, 1974).
- Gelman, Morris J. "Standings on the Status Quo," Tele-
vision, XIX (April, 1962).
- Gills, D. Hugh. "Broadcasting as Profession: A Socio-
Economic Approach," Journal of Broadcasting, 11
(Winter, 1966-67).
- Goodling, R. A. and Guthrie, G. M. "Some Practical Con-
siderations in Q-Sort Item Selection," Journal of
Counseling Psychology, 3 (1956), pp. 70-72.
- Hall, Richard H. "Professionalization and Bureaucrati-
zation," American Sociological Review, 33
(February, 1968), pp. 92-104.
- Jones, A. "Distribution of Traits in Current Q-Sort
Methodology," Journal of Abnormal and Social
Psychology, LIII (1956), pp. 90-95.
- Kelley, William T. "How Television Stations Price Their
Service," Journal of Broadcasting, XI (Fall, 1967).
- Kerlinger, F. N. "Progressivism and Traditionalism:
Basic Factors of Educational Attitudes," Journal
of Social Psychology, 48 (1958), pp. 11-135.
- Leroy, David J. "Levels of Professionalism in TV News-
men," Journal of Broadcasting, 17 (Winter, 1972-
73).

Lynch, Mervin D. and Sassewrath, Leonard H. "Dimensions of Personality Association of Network Newscasters," Journal of Broadcasting, X (Winter, 1965-66), pp. 33-43.

MacLean, Malcolm S., Jr. and Kao, Anne Li-An. "Picture Selection: An Editorial Game," Journalism Quarterly, 40 (1963), pp. 230-232.

MacLean, Malcolm S., Jr. and Kao, Anne Li-An. "Editorial Prediction of Magazine Picture Appeals," Iowa City: School of Journalism, University of Iowa, 1965.

Maloney, Martin. "Television Violence is not Harmful," TV Guide, (January 25, 1969).

Mandell, Lee M. and Shaw, Donald L. "Camera Angle and Bodily Activity," Journal of Broadcasting, XVII (Summer, 1973), pp. 353-362.

McQuitty, Louis L. "Elementary Linkage Analysis for Isolating Orthogonal and Oblique Types and Typal Relevancies," Educational and Psychological Measurement, XVII (Summer, 1957), pp. 207-228.

Monaghan, Robert R. "A Systematic Way of Being Creative," The Journal of Communication, 18 (March, 1968), pp. 47-56.

. "Creative Strategies in Audience Analysis," Educational Broadcasting Review, II (April, 1968), pp. 29-37.

- Monaghan, Robert R. and Titchner, Campbell B. "EBR Readership Profile Analysis," Educational Broadcasting Review, III (June, 1969), pp. 31-42.
- Monaghan, Robert R., Plummer, Joseph T., Rarick, David L. and Williams, Dwight A. "Predicting Viewer Preference for New TV Program Concepts," Journal of Broadcasting, 18 (Spring, 1974), pp. 131-142.
- Mori, T. "Structure of Motivations for Becoming a Teacher," Journal of Educational Psychology, 56 (1965), pp. 175-183.
- Munn, Mark. "The Profile of Station Personality," Journal of Broadcasting, 2 (Winter, 1957-58), pp. 13-24.
- "New Firm Rates TV Quality," Broadcasting, August 11, 1958, p. 34.
- "Q-Ratings Promise to Help Advertisers Predict Success or Failure of TV Shows," Printer's Ink, November 21, 1958, pp. 44-45.
- "Ratings Found 99 and 99/100% Pure," Broadcasting, February 7, 1966, p. 52.
- Schlenger, Mary Jane. "Cues on Q-Technique," Journal of Advertising Research, 9 (1969), pp. 53-60.
- Shostack, Herschel. "Factors Influencing Appeal of TV News Personalities," Journal of Broadcasting, XVIII (Winter, 1974), pp. 63-71.

- Topping, Malachi C. "The Forced Choice as a Measure of Television Station Image," Journal of Broadcasting, X (Spring, 1966), pp. 155-159.
- "TV-Q Ratings Aim to Ascertain Shows' Qualitative Standings," Advertising Age, 29 (August 11, 1958), p. 28.
- "TV Ratings: What They Are, How They Work," Changing Times, March, 1972, p. 39.
- Williams, Robert C. "On the Value of Varying TV Shots," Journal of Broadcasting, IX (Winter, 1964-65), pp. 33-44.
- Wittenborn, J.R. "Contributions and Current Status of Q Methodology," Psychology Bulletin, 58 (1961), pp. 132-142.
- Madow, William G. Evaluation of Statistical Methods Used in Obtaining Broadcast Ratings, Report of the Committee on Interstate and Foreign Commerce, 87th Cong., 1st Sess., 1961, H. Rept. 193.
- U.S. Congress, Hearing before the Special Subcommittee on Investigations of the House Committee on Interstate and Foreign Commerce on Broadcast Ratings. 88th Cong., 2d Sess., 1964. Cited in H.R. Rep. No. 1212, 89th Cong., 2d Sess., 13, 1966.

U.S. Congress. Hearing before the Special Subcommittee on Investigations of the House Committee on Interstate and Foreign Commerce on Broadcast Ratings.

88th Cong., 1st Sess., pt. 2 at 1780, 1963.

Audit and Surveys, Inc. All Radio Methodology Study, I
(September, 1966).

Cohen, Jacob. A Method of Market Segmentation Based on Multivariate Analysis of Attitude Data. Paper Presented at the First Annual Computer Conference, sponsored by Pace College and the New York Chapter of the American Statistical Association, New York, New York, December, 1966.

Committee on Nationwide Television Audience Measurements.
How Good Are Television Ratings? (continued. . .).
A Report Prepared by Statistical Research, Inc., and presented at the Advertising Research Foundation Annual Conference, October 14, 1969.

Home Testing Institute / TvQ Inc., TvQ National Service,
Report #8, March, 1969.

Mayer, Martin. How Good are Television Ratings? A Report on the Findings of the Committee on Nationwide Television Audience Measurements, Television Information Office: New York, New York (February, 1966).

Monaghan, Robert R. Repertory Grid Method for Communication Research. Paper presented at the Annual Conference of the Speech Association of America, Chicago, Illinois, September 29, 1966.

Stephenson, William and Danbury, Thomas. "Factor Analysis." Mimeograph explanation of centroid solution, Columbus, Missouri, University of Missouri, 1959.

Bertrand, Alvin L. and Hitt, Homer L. "Radio Habits in Rural Louisiana." Bulletin of Louisiana Agricultural Experiment Station, No. 440. Baton Rouge: Louisiana State University, 1949.

Bertrand, Alvin L. and Bates, Frederick L. "Television in Rural Louisiana." Bulletin of Louisiana Agricultural Experiment Station, No. 518. Baton Rouge: Louisiana State University, 1958.

Morning Advocate (Baton Rouge, Louisiana). December 9, 1975, p. 7-B.

Associated Press. October 25, 1975, 11:02 P.M., CST.

Baton Rouge (Louisiana) City Directory. Dallas, Texas:

R.L. Polk and Company, 1975.

Broadcasting Yearbook. Washington, D.C.: Broadcasting

Publications, Inc., 1974.

Toffler, Alvin. "Learning for Tomorrow." Public lecture presented at the Student Union, Louisiana State University, Baton Rouge, Louisiana, October 2, 1975.

_____. Personal interview with Geneva Carrol and Tom Hall, Researchers, Louisiana Office of State Planning, Baton Rouge, Louisiana. September 14, 1975.

Dickinson, John A. "A Q-Sort Analysis of Men's and Women's Reading Interests in Pictures." Unpublished Master's thesis, The School of Journalism, Louisiana State University, 1972.

Nattin, Nathan H. III. "An Analysis of Characteristics and Preferences of Daytime Television Viewers of the Middle to Upper Middle Income Group in Two Areas of Baton Rouge, Louisiana." Unpublished Master's thesis, The School of Journalism, Louisiana State University, 1966.

Simon, Jeffrey Neil. "Viewer Types and Viewer Preferences for Kinds of Television Violence." Unpublished Master's thesis, Department of Communications and Behavioral Sciences, The Ohio State University, 1969.

- Shosteck, Herschel. "Want Some Specific Ideas on Improving Your Local TV News Coverage?" Strauss Editor's Reports, No. 78 (January 11, 1971).
- Snare, Austin, Bednall, David H.B. and Sullivan, Lyndall M. "Relationship Between Liking and Watching TV Programs," Journalism Quarterly, 49 (Winter, 1972), pp. 750-753.
- "Soon the Home Video in Color," Broadcasting, March 30, 1970.
- Stephenson, William. "The Inverted Factor Technique," British Journal of Psychology, 26 (1936), pp. 344-361.
- Summers, Harrison B. "Qualitative Information Concerning Audiences," Journal of Broadcasting, V (Spring, 1961), pp. 147-160.
- Tankard, James W. Jr. "Eye Contact Research and Television Announcing," Journal of Broadcasting, XV (Winter, 1970-71), pp. 83-90.
- Thayer, John R. "The Relationship of Various Audience Composition Factors to Television Program Types," Journal of Broadcasting, VII (Summer, 1963), pp. 217-225.
- Tiemens, Robert K. "Some Relationships of Camera Angle to Communicator Credibility," Journal of Broadcasting, XIV (Fall, 1970), pp. 483-490.

Contributions of William Stephenson:

A Selected Bibliography

1. Correlating Persons Instead of Tests. Character and Personality, 1935, 4, pp. 17-24.
2. Alternative Views on Correlations Between Persons. Psychometrika, 1939, 85, 185-205.
3. The Q-Technique Study of Personality. Transactions of the New York Academy of Sciences, Ser. 2, 1949, 2, pp. 215-219.
4. A Statistical Approach to Typology: the Study of Trait-Universes. Journal of Clinical Psychology, 1950, 6, pp. 26-38.
5. Some Observations on Q-Technique. Psychological Bulletin, 1952, 49, pp. 483-498.
6. The Study of Behavior: Q-Technique and its Methodology. Chicago: University of Chicago Press, 1953.
7. Postulates of Behaviorism. Philosophy of Science, 1953, 20, 110-120.
8. Principles of Selection of News Pictures. Journalism Quarterly, 1960, 37, pp. 61-68.
9. Philosophy or Statistics? Contemporary Psychology, 1961, 6, pp. 46-47.
10. "Ideal" Types. Psychological Record, 1962, 12, pp. 9-16.

11. Independency and Operationism in Q-Sorting. Psychological Record, 1963, 13, pp. 269-272.
12. Application of Q-Method to the Measurement of Public Opinion. Psychological Record, 1964, 14, pp. 265-273.
13. Definition of Opinion, Attitude and Belief. Psychological Record, 1965, 15, pp. 281-288.
14. The Play Theory of Mass Communication. Chicago: University of Chicago Press, 1967.
15. The Contribution of Q to Attitude Research. In L. Adler and I. Crespi (Eds.), Attitude Research on the Rocks. Chicago: American Marketing Association, 1968, pp. 160-171.
16. Consciousness Out--Subjectivity In. Psychological Record, 1969, 19, pp. 65-82.

APPENDIX A
SAMPLE QUESTIONNAIRE

Code: _____ Name: _____

Address: _____ Occupation _____

PLEASE CIRCLE THE CORRECT ANSWER:

AGE:

- A. Under 20
- B. 20 - 28
- C. 29 - 34
- D. 35 - 40
- E. 41 - 45
- F. Over 45

RACE:

- A. Caucasian
- B. Negroid
- C. Spanish
- D. Other

EDUCATION:

- A. 0 - 4 years
- B. 5 - 8 years
- C. 9 -11 years
- D. high school graduate
- E. some college
- F. college grad.
- G. post-grad.

SEX:

- A. Male
- B. Female

ANNUAL INCOME:

- A. less than \$5,500
- B. \$5,501 - \$11,000
- C. \$11,001 - \$16,000
- D. \$16,001 or more

How many television newscasts do you watch in an average day?

- A. 0 each day
- B. 1 each day
- C. 2 each day
- D. 3 each day
- E. 4 each day

How many television sets do you have in your home? _____

Do you have cable television in your home? _____

Have you ever watched television news programs in other cities besides Baton Rouge? _____ If yes, how many? _____

Do you prefer to watch national network news?

ALWAYS SOMETIMES NEVER

Do you prefer to watch local Baton Rouge news?

ALWAYS SOMETIMES NEVER

APPENDIX B

SUMMARIZATION OF INTERVIEW-GENERATED
CONCEPTS FOR STATEMENT CONSTRUCTION

1. Mixing blacks and whites makes me mad as hell.
2. I don't care about the presentation; just so it's factual.
3. I watch the television to learn what's happening.
4. I don't want a damn nigger talking about a white person.
5. I don't care who gives the news; just so it's factual.
6. A problem with television news is that it's too short.
7. Television news is a teaser for the newspaper.
8. It bugs me when a reporter interviews someone.
9. I don't like to see scenes that have nothing to do with a news story.
10. Films are a waste of time and money.
11. I like to see a reporter who delivers the news well.
12. Different ways of giving the news are confusing; it's best for one reporter to do it.
13. My biggest complaint is that there are too many commercials; sponsors should buy blocks of time.
14. I watch the news to keep up with current events breaking at the minute.
15. I don't like to see political scraps on the news like school board members arguing.
16. It's o.k. to read about controversy, but there's not enough time to tell about it.
17. I watch the news as a matter of habit.
18. I don't like to see local news that's slanted.
19. I respect a newscaster who is mature in years.

20. I wouldn't care to see female newscasters.
21. I watch the news out of curiosity; it's sort of a political function.
22. I like to watch news that concerns important topics.
23. I look for reporters who give the facts and resent people who tell you how to think.
24. I want reporters to give authentic, factual news, not second-hand news that hasn't been verified.
25. I like reporters who use good diction, language that is easily understood and pleasant-looking people.
26. It makes no difference to me how the news is presented, just as long as it's factual.
27. I watch the news mainly out of curiosity.
28. It makes no difference who gives the news, as long as they give it right.
29. I watch the news to know what's happening everyday.
30. I like a balanced presentation with a sense of humor; a common-sensical approach.
31. I prefer to watch in-depth studies, like Charles Kuralt's "On the Road."
32. I definitely like to see news that is separated from commentary.
33. I object to the subconscious attempt of TV to influence.
34. I never think of classifying reporters, but I respect intelligence and personality.
35. News that is passed off as an objective presentation, but isn't, makes me mad.
36. I watch the news to keep up to date.

37. Reporters like Tom Snyder, who try to be entertaining, inspires a little distrust.
38. I don't like news based on rumors; I want them documented.
39. I don't like stories to be constantly repeated.
40. I prefer news that is factual, short and to the point.
41. I prefer to see reporters on the scene of the news, presented on film, just not too long.
42. I watch television news because you get it quicker.
43. It's relaxing to watch when it's good; it's also a habit.
44. Television news is a blessing to older people who lose interest in reading.
45. I like reporters who give the news straight.
46. I prefer to see young male reporters, mostly out of habit.
47. I like "live" news; not necessarily on film.
48. I find television news relaxing and entertaining.
49. I watch to keep up with things.
50. I like to see black reporters, but I trust both blacks and whites of any age.
51. I prefer to see news stories of all kinds.
52. I'm interested in both studio and film news, but I prefer filmed because it's first-hand.
53. I watch the news to catch it first-hand in the home, especially if I don't have a paper.
54. I have no preference for kinds of newsmen; they all say the same thing.

55. I like a station like Channel 33, because they give you more understanding of different things; there's more of it.
56. I watch television news because I want to know what's going on.
57. I don't care who gives the news as long as they talk all right.
58. I prefer to see filmed reports that give action.
59. I like to see fast-breaking news to see who got killed or who got busted for pot.
60. I watch television news to find out what's what.
61. I watch the news to find out what's going on.

APPENDIX C

Q-SORT STATEMENTS:

FINAL, REVISED DECK

ITEM #STATEMENT

1,2

IN AN ELECTION YEAR, THE RACE FOR GOVERNOR IS COVERED BY A VETERAN JOURNALIST WHO REPORTS THE CAMPAIGN FAIRLY AND IMPARTIALLY.

1,3

TWO SCHOOL BOARD MEMBERS, WHO DISAGREE ON A VITAL ISSUE, ARE INTERVIEWED "LIVE" IN A TELEVISION STUDIO. THE ATMOSPHERE IS CORDIAL, BUT THE MEN BEGIN ARGUING LOUDLY WITH EACH OTHER.

1,4

ONE OF THE REQUIREMENTS OF BEING A REPORTER AT A CERTAIN TELEVISION STATION IS THAT ALL REPORTERS MUST BELONG TO A PROFESSIONAL ORGANIZATION SUCH AS A NATIONAL JOURNALISM SOCIETY. EVERYONE WHO BELONGS TO THESE GROUPS MUST PASS STRICT TESTS OF BEING FAIR AND OBJECTIVE IN THEIR REPORTING.

1,5

IN A HALF-HOUR TELEVISION NEWSCAST, ALMOST ALL THE TIME IS SPENT REPORTING THE NEWS EXACTLY AS IT HAPPENED. THEN, THE LAST FEW MINUTES OF THE NEWS IS SPENT WITH THE REPORTERS TALKING ABOUT THE NEWS EVENTS

ITEM #

STATEMENT
AND GIVING PERSONAL OBSERVATIONS
ON THE MEANING OF IT ALL.

1,6

A BLACK, FEMALE REPORTER, WHO
COVERS THE MAYOR'S OFFICE, CAN BE
DEPENDENT ON TO GIVE THE NEWS FAC-
TUALLY AND ACCURATELY.

1,7

A TELEVISION NEWS STATION THAT IS
KNOWN TO BE OBJECTIVE IN ITS RE-
PORTING HAS A POLICY OF PUTTING
ITS NEWS STORIES ON FILM BEFORE
BEING BROADCAST.

1,8

IN SPITE OF A LOT OF MECHANICAL
AND TECHNICAL MISTAKES, A CERTAIN
TELEVISION STATION DOES REPORT THE
NEWS ACCURATELY AND RELIABLY.

2,1

A GOOD-LOOKING MALE REPORTER, JUST
OUT OF COLLEGE, COVERS FAST-BREAKING
NEWS SUCH AS ROBBERIES AND ACCI-
DENTS THOROUGHLY AND RELIABLY.

2,3

THE MAN WHO DOES THE 6 O'CLOCK NEWS
"LIVE" FROM THE STUDIO EACH DAY
SPEAKS WITH AUTHORITY, IS EASY TO
LISTEN TO AND PLEASANT TO WATCH.

ITEM #STATEMENT

2,4

A BLACK, MALE REPORTER HAS BEEN IN THE NEWS BUSINESS FOR 16 YEARS, BELONGS TO PROFESSIONAL ORGANIZATIONS, AND KNOWS HOW TO REPORT THE NEWS WELL.

2,5

A CERTAIN STATION HAS EMPLOYED A WHITE, FEMALE REPORTER FOR A NUMBER OF YEARS. SHE WAS ONE OF THE FIRST WOMEN REPORTERS IN THE AREA AND ALTHOUGH SHE LIKES TO ADD HER PERSONAL OPINIONS, THEY ARE ALWAYS SEPARATE FROM THE FACTS OF THE STORY.

2,6

ALTHOUGH A CERTAIN NEWS REPORTER IS PLEASANT TO LOOK AT, SHE USES POOR GRAMMAR AND POOR DICTION AND TALKS IN A HIGH-PITCHED, SQUEAKY VOICE.

2,7

VIEWERS NEVER SEE A CERTAIN REPORTER DOING A "LIVE" BROADCAST FROM THE STUDIO, BUT WHEN THEY DO SEE HIM ON FILM, THEY ENJOY WATCHING HIS REPORTING.

2,8

ALTHOUGH VIEWERS FIND THE YOUNG WOMAN REPORTER REFRESHING IN HER APPROACH, IT IS CLEAR FROM WATCHING

ITEM #STATEMENT

- HER WORK THAT SHE IS NOT WELL-
TRAINED AND FREQUENTLY DOESN'T
KNOW WHAT SHE'S DOING.
- 3,1 ON ELECTION NIGHT, THE TELEVISION
REPORTERS BROADCAST THE ELECTION
RETURNS BY GIVING THE EXACT FIGURES
FROM EACH VOTING PLACE AS SOON AS
THEY COME IN.
- 3,2 THE MAN WHO GIVES THE 10 O'CLOCK
NEWS EACH DAY IS WELL-LIKED BY THE
VIEWERS BECAUSE HE IS ABLE TO PRE-
SENT THE NEWS IN A CLEAR AND UN-
DERSTANDABLE WAY WHILE ALSO BEING
EASY TO LOOK AT AND LISTEN TO.
- 3,4 "LIVE" NEWS PROGRAMS PRESENTED BY
A TELEVISION STATION FEATURE IN-
DEPTH TREATMENTS OF TOPICS OF LOCAL
INTEREST. THESE PROGRAMS ARE OF
HIGH QUALITY IN BOTH THE TREATMENT
OF THE TOPIC AND THE WAY IT IS
PRESENTED.
- 3,5 THREE REPORTERS GATHER TO DISCUSS
THEIR OPINIONS ON AN ISSUE OF CUR-
RENT INTEREST IN A "LIVE" STUDIO
BROADCAST.

ITEM #STATEMENT

3,6

A YOUNG, BLACK REPORTER WHO HAS BEEN ON HIS FIRST JOB ONLY A FEW MONTHS IS ASSIGNED TO BROADCAST THE NIGHTLY NEWS.

3,7

AN IN-DEPTH DOCUMENTARY ON A SUBJECT OF CRUCIAL CONCERN IS PRESENTED BY A REPORTER IN THE STUDIO, WITH FILMED SEGMENTS SHOWN DURING THE REPORTING.

3,8

A CERTAIN TELEVISION STATION KNOWS THAT THE GOVERNMENT REQUIRES THEM TO BROADCAST PUBLIC SERVICE PROGRAMS. SO, THE NEWS STAFF SIMPLY THROWS TOGETHER THESE PROGRAMS WHICH ARE DONE RIGHT FROM THE STUDIO WITHOUT MUCH THOUGHT FOR THEIR QUALITY.

4,1

NEWS REPORTS ARE PRESENTED FACTUALLY AND ACCURATELY, EXACTLY AS THEY HAPPENED IN AN INTERESTING AND PROFESSIONAL WAY.

4,2

A MATURE, EXPERIENCED REPORTER WHO'S BEEN IN THE BUSINESS FOR YEARS AND KNOWS WHAT HE'S DOING PUTS HIS JOB FIRST IN HIS LIFE.

<u>ITEM #</u>	<u>STATEMENT</u>
4,3	A NEWSCAST IS PRESENTED THAT IS WELL-WRITTEN, SHORT AND TO THE POINT. EACH STORY IS READ BY THE REPORTER AT HIS DESK AND NO FILM IS USED.
4,5	THE "BETWEEN-THE-LINES" MEANING OF A NEWS STORY IS GIVEN IN AN ANALYSIS THAT IS PROFESSIONALLY PRESENTED AND WELL-WRITTEN.
4,6	A YOUNG, BLACK, FEMALE REPORTER IS ASSIGNED TO COVER THE TRIAL OF A WHITE SHERIFF'S DEPUTY ACCUSED OF RAPING A BLACK PRISONER. THE REPORTER REVIEWS EACH DAY'S PROCEEDINGS USING THE LATEST CAMERA AND MICROPHONE EQUIPMENT.
4,7	THE MOST MODERN FILM CAMERAS AND EQUIPMENT ARE USED TO RECORD THE NEWS. THE COLOR IS ALWAYS VERY CLEAR WITHOUT ANY TECHNICAL ERRORS SUCH AS THE FILM BREAKING.
4,8	THERE SEEMS TO BE TWO KINDS OF REPORTERS AT A CERTAIN TELEVISION STATION. ONE GROUP IS DEDICATED

ITEM #STATEMENT

- TO SERVING THE PUBLIC; THE OTHER GROUP IS MORE INTERESTED IN COLLECTING THEIR PAY AND DOING AS LITTLE WORK AS POSSIBLE.
- 5,1 THE MAIN POINTS OF THE GOVERNOR'S SPEECH ARE REVIEWED WITH THE REPORTER'S INTERPRETATION OF THE SPEECH INCLUDED.
- 5,2 A WHITE WOMAN WHO'S BEEN REPORTING THE NEWS FOR MANY YEARS IS ASSIGNED TO DO A DAILY SUMMARY OF THE NEWS AND TO GIVE HER OPINION OF WHAT IS IMPORTANT AND UNIMPORTANT TO WATCH FOR.
- 5,3 AFTER THE LOCAL AND STATE ELECTION RESULTS ARE IN AND THE WINNERS AND LOSERS KNOWN, A GROUP OF NEWS REPORTERS PRESENT A "LIVE" COMMENTARY ON THE POSSIBLE MEANING OF THE ELECTION ON THE NEXT PRESIDENTIAL CAMPAIGN.
- 5,4 THE STATION'S PHILOSOPHY IS THAT THE PEOPLE NEED TO BE TOLD WHAT THE NEWS MEANS. SO THE VIEWERS SEE A

ITEM #STATEMENT

BROADCAST THAT MIXES OPINION WITH FACT, ALTHOUGH IT IS DONE IN A PROFESSIONAL MANNER.

5,6

A WOMAN REPORTER WHO WAS BORN IN PUERTO RICO, BUT RECENTLY GRADUATED FROM COLLEGE IN THE UNITED STATES, REPORTS THE NEWS WITH A COMMENT ON HOW IT APPLIES TO A PUERTO RICAN AUDIENCE.

5,7

A TELEVISION NEWS STATION SPENDS MOST OF ITS TIME GIVING FILMED REPORTS OF THE NEWS WITH REPORTERS ON THE SCENE OF THE EVENT. THE REPORTS ARE USUALLY PRESENTED FROM A PERSONAL VIEWPOINT.

5,8

A RUMOR IS CIRCULATING THAT A LOCAL COLLEGE FOOTBALL COACH IS ABOUT TO BE FIRED. A TELEVISION STATION REPORTS THAT RUMOR AS A FACT, BEFORE IT IS CONFIRMED, AND GIVES ITS OPINION ON WHETHER THE FIRING IS JUSTIFIED.

6,1

A YOUNG, BLACK REPORTER, WHO SUFFERS FROM POOR ARTICULATION AND

ITEM #STATEMENT

ENUNCIATION, HAS THE ABILITY TO WRITE THE NEWS WELL AND REPORT IT FACTUALLY AND ACCURATELY.

6,2

AN EXPERIENCED WHITE REPORTER IS ABLE TO WRITE THE NEWS WELL, BUT HE DOES NOT LOOK OR SOUND GOOD ON TELEVISION.

6,3

BECAUSE THE GOVERNMENT REQUIRES A CERTAIN NUMBER OF MINORITY EMPLOYEES, A CERTAIN STATION HIRES A YOUNG, BLACK REPORTER TO GIVE THE NEWS FROM THE STUDIO ON THE WEEKEND.

6,4

ALTHOUGH HE DOESN'T LOOK OR SOUND TOO WELL ON TELEVISION, AND HE HAS A "DRY" PERSONALITY, A YOUNG, BLACK REPORTER IS ASSIGNED TO COVER A LOCAL POLITICAL RACE BECAUSE HE CAN DO IT LIKE A PROFESSIONAL.

6,5

"NEWS FROM A MINORITY VIEWPOINT" IS A THREE-TIMES A WEEK FEATURE ON THE 10 O'CLOCK NEWS. A BLACK MALE AND A BLACK FEMALE REPORTER TEAM UP TO INTERPRET CURRENT EVENTS FOR MINORITY GROUPS.

ITEM #STATEMENT

6,7

THE AFTERMATH OF A FATAL CAR ACCIDENT IN WHICH TWO TEEN-AGERS WERE KILLED IS REPORTED ON FILM BY A YOUNG, FEMALE REPORTER.

6,8

PROFESSIONAL REPORTERS KNOW HOW TO WRITE THE NEWS OBJECTIVELY. BUT SOME YOUNG, WOMAN REPORTERS AT A CERTAIN TELEVISION STATION ARE JUST THE OPPOSITE. THEY TEND TO SLANT THE NEWS WITH THEIR OWN OPINIONS AND DON'T CARE ABOUT THEIR RESPONSIBILITY TO GIVE THE PUBLIC THE FACTS.

7,1

TO MAKE SURE THAT THE NEWS IS REPORTED WITH STRICT OBJECTIVITY AND WITHOUT OPINION, A TELEVISION STATION RECORDS ALL THE NEWS ON FILM SO IT CAN BE REVIEWED BEFORE BEING BROADCAST.

7,2

AN EXPERIENCED WHITE MALE REPORTER IS ASSIGNED TO GO OUT AND FILM ENTERTAINING "FEATURE" REPORTS FOR THE NEWS.

7,3

A TELEVISION STATION DIVIDES ITS NEWS INTO TWO KINDS: A REPORTER

ITEM #STATEMENT

READING THE NEWS FROM THE STUDIO AND FILMED REPORTS FROM THE SCENE OF THE EVENT.

7,4

WHEN A STATION USES FILMED REPORTS FOR ITS NEWS, THEY MAKE CERTAIN THE EQUIPMENT IS IN GOOD WORKING ORDER WITH NO CHANCE FOR TECHNICAL ERRORS.

7,5

A CANDIDATE FOR GOVERNOR GIVES A SPEECH TO A FUND-RAISING GROUP. THE SPEECH IS FILMED AND THEN CUT DOWN SO THAT ONLY THE PARTS THE NEWSMAN FEELS WERE IMPORTANT ARE PRESENTED ON THE NEWS.

7,6

A BLACK, FEMALE REPORTER COVERS A CANDIDATE FOR OFFICE WHILE HE IS CAMPAIGNING. BECAUSE THE CANDIDATE IS OUT OF TOWN A LOT, SHE MUST PUT HER REPORTS ON FILM, EVEN THOUGH THE FILM MAKES HER LOOK BAD AND SEEM AS IF SHE HAS NO PERSONALITY.

7,8

AFTER A MINOR CAR ACCIDENT, A REPORTER FILMS CLOSE-UP SCENES OF A DENTED BUMPER AND WAITS FOR THE DRIVER TO BEGIN CRYING BEFORE INTERVIEWING HIM. ALL THIS IS DONE

ITEM #STATEMENT

- TO MAKE THE ACCIDENT SEEM MORE SPECTACULAR THAN IT REALLY WAS.
- 8,1 THE FACTS OF A STORY ARE ALL BROUGHT OUT, BUT IT'S DONE IN A WAY THAT MAKES IT CONFUSING TO FOLLOW.
- 8,2 A STATION'S NEWS STAFF CONSISTS OF EXPERIENCED, AUTHORITATIVE, EXPERT REPORTERS, BUT THE TECHNICAL CREW HAS DIFFICULTY PUTTING THE REPORTS ON THE AIR WITHOUT MISTAKES.
- 8,3 DURING NEWS COVERAGE OF A HURRICANE HEADING TOWARDS NEW ORLEANS AND BATON ROUGE, REPORTERS ARE SENT TO RELAY BACK LIVE REPORTS FROM THE SCENE. BUT THE EQUIPMENT USED FOR THIS IS SO OLD, THAT THE CONNECTIONS KEEP BREAKING AND THE TRANSMISSION QUALITY IS BAD.
- 8,4 THE REPORTERS AT A CERTAIN TELEVISION STATION ARE AS PROFESSIONAL AS CAN BE, DEDICATED TO BRINGING THE NEWS TO THE AUDIENCE. BUT IT'S ANOTHER STORY WITH THE BACKSTAGE PEOPLE. THEY'RE ALWAYS MAKING MISTAKES BECAUSE THEY COULDN'T CARE LESS ABOUT THE NEWS.

ITEM #STATEMENT

8,5

HAVING WORKED AT A TELEVISION STATION WITHOUT ANY KIND OF RECOGNITION OR PAY RAISE, A REPORTER HAS BECOME DISCOURAGED AND HAS FORGOTTEN THAT HIS REAL JOB IS TO SERVE THE PUBLIC AND TO REPORT THE NEWS FACTUALLY AND RELIABLY.

8,6

A YOUNG, BLACK REPORTER WITH A DISTINCT "BLACK" ACCENT TO HIS SPEECH DOES A REPORT ON ADOPTING BABIES. HIS REPORT FOCUSES MOSTLY ON THE TROUBLES BLACK BABIES HAVE IN BEING ADOPTED.

8,7

IN ORDER TO SAVE MONEY, A TELEVISION NEWS STATION WILL BUY CHEAP FILM, EVEN THOUGH THE COLOR IS BAD AND IT KEEPS BREAKING.

APPENDIX D

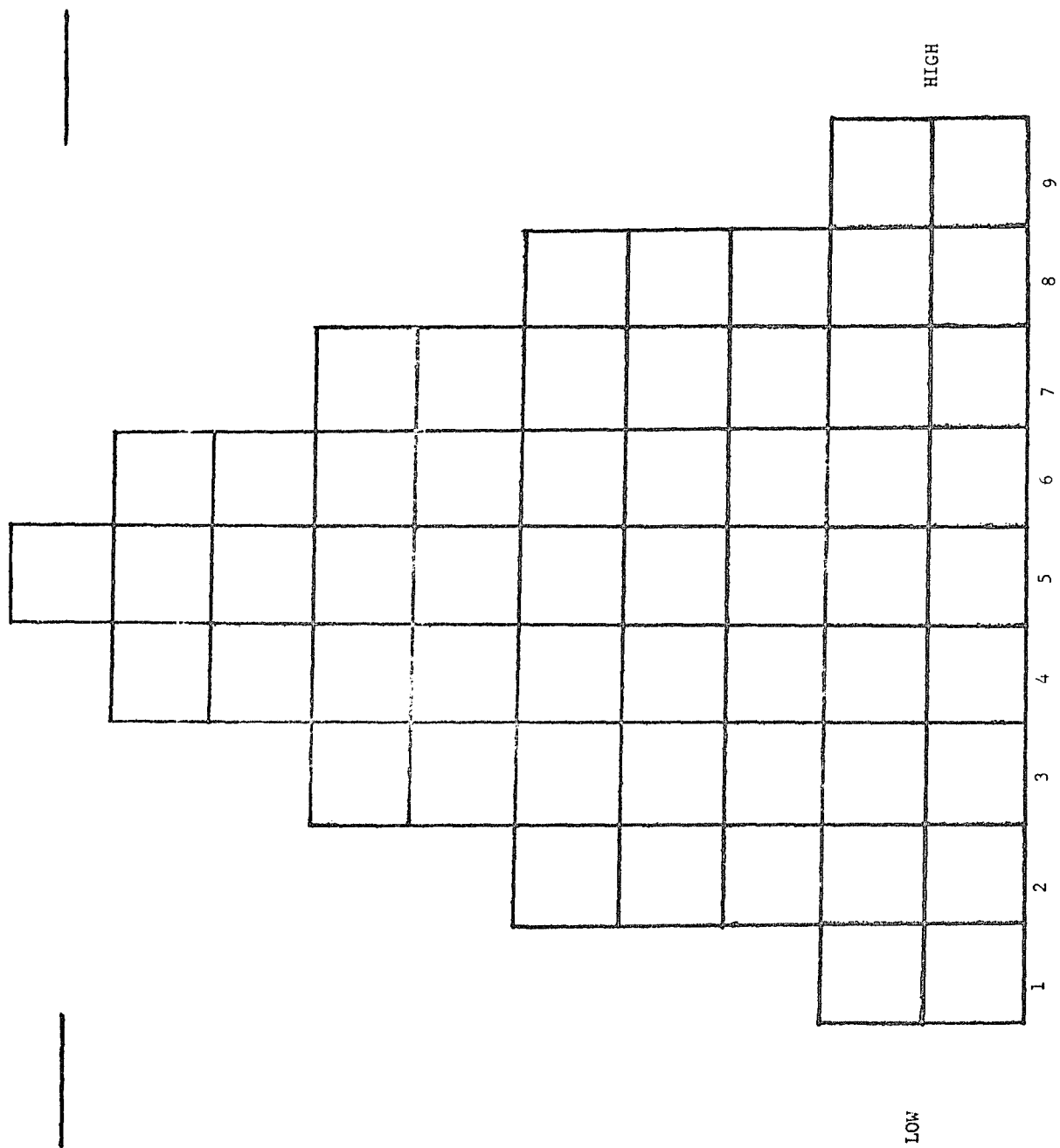
Q-SORT STATEMENT VALIDATION FORM

Respondent # _____

"Objective"		"Professional"		"Live"	
Statement #:	RIGHT WRONG	Statement #:	RIGHT WRONG	Statement #:	RIGHT WRONG
1,2		4,1		3,1	
1,3		4,2		3,2	
1,4		4,3		3,4	
1,5		4,5		3,5	
1,6		4,6		3,6	
1,7		4,7		3,7	
1,8		4,8		3,8	
2,1		1,4		1,3	
3,1		2,4		2,3	
4,1		3,4		4,3	
5,1		5,4		5,3	
6,1		6,4		6,3	
7,1		7,4		7,3	
8,1		8,4		8,3	
"Interpretative"		"Non-Professional"		"Film"	
Statement #:	RIGHT WRONG	Statement #:	RIGHT WRONG	Statement #:	RIGHT WRONG
2,1		8,1		6,1	
2,3		8,2		6,2	
2,4		8,3		6,3	
2,5		8,4		6,4	
2,6		8,5		6,5	
2,7		8,6		6,7	
2,8		8,7		6,8	
1,2		1,8		1,8	
3,2		2,8		2,8	
4,2		3,8		3,8	
5,2		4,8		4,8	
6,2		5,8		5,8	
7,2		6,8		6,8	
8,2		7,8		7,8	

APPENDIX E

SAMPLE Q-SORT BAR GRAPH



APPENDIX F

INSTRUMENT RELIABILITY DATA SHEET

Respondent #: _____

Frames of Reference: Ideal News #1 & #2

Statement #: Sort
 A B

1,2	—	—
1,3	—	—
1,4	—	—
1,5	—	—
1,6	—	—
1,7	—	—
1,8	—	—
2,1	—	—
2,3	—	—
2,4	—	—
2,5	—	—
2,6	—	—
2,7	—	—
2,8	—	—
3,1	—	—
3,2	—	—
3,4	—	—
3,5	—	—
3,6	—	—
3,7	—	—

Statement #: Sort
 A B

4,1	—	—
4,2	—	—
4,3	—	—
4,5	—	—
4,6	—	—
4,7	—	—
4,8	—	—
5,1	—	—
5,2	—	—
5,3	—	—
5,4	—	—
5,6	—	—
5,7	—	—
5,8	—	—
6,1	—	—
6,2	—	—
6,3	—	—
6,4	—	—
6,5	—	—
6,7	—	—
6,8	—	—

Statement #: Sort
 A B

7,1	—	—
7,2	—	—
7,3	—	—
7,4	—	—
7,5	—	—
7,6	—	—
7,8	—	—
8,1	—	—
8,2	—	—
8,3	—	—
8,4	—	—
8,5	—	—
8,6	—	—
8,7	—	—

APPENDIX G

TALLY SHEET

for Computing Sum of d^2 .

TALLY SHEET: for Computing Sum of d^2 .

Respondent #: _____

Station #: _____

1 _____ x 1 = _____

2 _____ x 4 = _____

3 _____ x 9 = _____

4 _____ x 16 = _____

5 _____ x 25 = _____

6 _____ x 36 = _____

7 _____ x 49 = _____

8 _____ x 64 = _____

Total: _____

r: _____

APPENDIX H
RESPONDENT Q-SORT CORRELATIONS
FOR EACH STATION'S FACTORS

Station #1 -- Factor #1

	RESPONDENT NUMBER													
	1	4	6	7	8	9	11	13	14	17	24	27	28	30
1	1.00	.36	.60	.58	.71	.56	.48	-.58	.47	.60	.66	.45	.46	.57
4	.36	1.00	.33	.35	.28	.18	.23	-.39	.24	.34	.19	.08	.11	.31
6	.60	.33	1.00	.48	.45	.47	.32	-.35	.27	.33	.48	.38	.28	.51
7	.58	.35	.48	1.00	.52	.32	.33	-.55	.07	.40	.31	.36	.40	.32
8	.71	.28	.45	.52	1.00	.47	.53	-.57	.36	.54	.52	.55	.43	.53
9	.56	.18	.47	.32	.47	1.00	.57	-.46	.45	.39	.49	.72	.51	.16
11	.48	.23	.32	.33	.53	.57	1.00	-.37	.35	.54	.57	.49	.42	.27
13	-.58	-.39	-.35	-.55	-.57	-.46	-.37	1.00	-.22	-.41	-.30	-.47	-.53	-.46
14	.47	.24	.27	.07	.36	.45	.35	-.22	1.00	.47	.44	.33	.34	.47
17	.60	.34	.33	.40	.54	.39	.54	-.41	.47	1.00	.54	.35	.47	.50
24	.66	.19	.48	.31	.52	.49	.57	-.30	.44	.54	1.00	.41	.47	.57
27	.45	.08	.38	.36	.55	.72	.49	-.47	.33	.35	.41	1.00	.43	.53
28	.46	.11	.28	.40	.43	.51	.42	-.53	.34	.47	.47	.43	1.00	.39
30	.57	.31	.51	.32	.53	.16	.27	-.46	.47	.50	.57	.53	.39	1.00

+
-.35 = Significant at the .01 level of confidence with 54 degrees of freedom

+
-.27 = Significant at the .05 level of confidence with 54 degrees of freedom

Station #1 -- Factor #2

RESPONDENT NUMBER

	2	15
2	1.00	.320
15	.320	1.00

Station #1 -- Factor #3 (on following page)

Station #1 -- Factor #4

RESPONDENT NUMBER

	4	10	23
4	1.00	-.258	.083
10	-.258	1.00	.407
23	.083	.407	1.00

Station #1 -- Factor #5

RESPONDENT NUMBER

	7	29
7	1.00	.122
29	.122	1.00

Station #1 -- Factor #6

RESPONDENT NUMBER

	12	25
12	1.00	-.140
25	-.140	1.00

Station #1 -- Factor #3

	RESPONDENT NUMBER												
	3	5	7	9	11	13	18	19	20	21	26	27	28
3	1.00	-.02	.04	.43	.58	.00	.17	.16	-.11	.10	.08	.29	.43
5	-.02	1.00	.65	.41	.01	-.51	.39	.54	.49	.47	-.31	.29	.26
7	.04	.65	1.00	.47	.03	-.55	.47	.58	.56	.54	-.15	.42	.38
9	.43	.41	.47	1.00	.37	-.32	.46	.34	.41	.35	-.10	.35	.58
11	.58	.01	.03	.37	1.00	-.07	.19	.09	.10	.11	.01	.36	.27
13	.00	-.51	-.55	-.32	-.07	1.00	.49	-.42	-.45	-.53	.32	-.28	-.17
18	.17	.39	.47	.46	.19	-.49	1.00	.43	.46	.39	-.05	.36	.20
19	.16	.54	.58	.34	.09	-.42	.43	1.00	.32	.45	-.24	.44	.33
20	-.11	.49	.56	.41	.10	-.45	.46	.32	1.00	.39	-.15	.28	.17
21	.10	.47	.54	.35	.11	-.53	.39	.45	.39	1.00	-.20	.37	.38
26	.08	-.31	-.15	-.10	.01	.32	-.05	-.24	-.15	-.20	1.00	.03	.00
27	.29	.29	.42	.35	.36	-.28	.36	.44	.28	.37	.03	1.00	.30
28	.43	.26	.38	.58	.27	-.17	.20	.33	.17	.38	.00	.30	1.00

Station #1 -- Factor #7

RESPONDENT NUMBER

	<u>16</u>	<u>26</u>	<u>31</u>
16	1.00	-.166	.184
26	-.166	1.00	-.153
31	.184	-.153	1.00

Station #1 -- Factor #8

RESPONDENT NUMBER

	<u>22</u>	<u>31</u>
22	1.00	.171
31	.171	1.00

Station #2 -- Factor #1 (on following page)

Station #2 -- Factor #2

RESPONDENT NUMBER

	<u>3</u>	<u>9</u>	<u>11</u>	<u>27</u>	<u>28</u>
3	1.00	.434	.587	.293	.434
9	.434	1.00	.372	.355	.587
11	.587	.372	1.00	.368	.271
27	.293	.355	.368	1.00	.302
28	.434	.587	.271	.302	1.00

Station #2 == Factor #1

RESPONDENT NUMBER

	4	5	6	7	8	9	10	12	13	14	17	18	19	20	21	27	29	30
4	1.00	.55	.61	.45	.56	.31	-.51	.57	-.41	.31	.35	.49	.49	.50	.46	.32	.43	.66
5	.55	1.00	.65	.65	.57	.41	-.63	.53	-.51	.40	.40	.39	.54	.49	.47	.47	.53	.56
6	.61	.65	1.00	.62	.66	.57	-.53	.59	-.57	.47	.49	.57	.51	.57	.53	.38	.42	.60
7	.45	.65	.62	1.00	.62	.47	-.50	.51	-.55	.47	.45	.47	.58	.56	.54	.42	.48	.52
8	.56	.57	.66	.62	1.00	.46	-.41	.63	-.39	.46	.48	.40	.59	.44	.46	.46	.41	.51
9	.31	.41	.57	.47	.46	1.00	-.28	.30	-.32	.53	.28	.46	.34	.41	.35	.35	.41	.54
10	-.51	-.63	-.53	-.50	-.41	-.28	1.00	-.42	.40	-.22	-.48	-.35	-.48	-.43	-.36	-.27	-.48	-.43
12	.57	.53	.59	.51	.63	.30	-.42	1.00	-.47	.35	.46	.47	.59	.52	.52	.34	.38	.52
13	-.41	-.51	-.57	-.55	-.39	-.32	.40	-.47	1.00	-.45	-.50	-.49	-.42	-.45	-.53	-.28	-.50	-.41
14	.31	.40	.47	.47	.46	.53	-.22	.35	-.45	1.00	.30	.50	.28	.38	.32	.31	.39	.36
17	.35	.40	.49	.45	.48	.28	-.48	.46	-.50	.30	1.00	.33	.47	.34	.38	.68	.36	.39
18	.49	.39	.57	.47	.40	.46	-.35	.47	-.49	.50	.33	1.00	.43	.46	.39	.36	.54	.46
19	.49	.54	.51	.58	.59	.34	-.48	.59	-.42	.28	.47	.43	1.00	.32	.45	.44	.39	.53
20	.50	.49	.57	.56	.44	.41	-.43	.52	-.45	.38	.34	.46	.32	1.00	.39	.28	.42	.36

Station #2 -- Factor #1 (continued)

	RESPONDENT NUMBER																	
	4	5	6	7	8	9	10	12	13	14	17	18	19	20	21	27	29	30
.																		
.																		
.																		
21	.46	.47	.53	.54	.46	.35	-.36	.52	-.53	.32	.38	.39	.45	.39	1.00	.37	.46	.43
27	.32	.47	.38	.42	.46	.35	-.27	.34	-.28	.31	.68	.36	.44	.28	.37	1.00	.41	.30
29	.43	.53	.42	.48	.41	.41	-.48	.38	-.50	.39	.36	.54	.39	.42	.46	.41	1.00	.30
30	.66	.56	.60	.52	.51	.54	-.43	.52	-.41	.36	.39	.46	.53	.36	.43	.30	.30	1.00

Station #2 -- Factor #3

RESPONDENT NUMBER

	<u>2</u>	<u>31</u>
2	1.00	-.214
31	-.214	1.00

Station #2 -- Factor #4

RESPONDENT NUMBER

	<u>25</u>	<u>27</u>
25	1.00	-.078
27	-.078	1.00

Station #2 -- Factor #5

RESPONDENT LOADING:

INSIGNIFICANT FACTOR

Station #2 -- Factor #6

RESPONDENT NUMBER

	<u>1</u>	<u>15</u>	<u>16</u>	<u>26</u>
1	1.00	.254	-.236	.017
15	.254	1.00	-.245	.135
16	-.236	-.245	1.00	-.197
26	.017	.135	-.197	1.00

Station #2 -- Factor #7

RESPONDENT NUMBER

	2	24	26
2	1.00	.421	-.311
24	.421	1.00	-.385
26	-.311	-.385	1.00

Station #2 -- Factor #8

RESPONDENT NUMBER

	13	15	22
13	1.00	-.192	-.442
15	-.192	1.00	.320
22	-.442	.320	1.00

Station #3 -- Factor #1 (on following page)

Station #3 -- Factor #2

RESPONDENT NUMBER

	3	10	23	28
3	1.00	.289	-.293	.175
10	.289	1.00	-.280	.328
23	-.293	-.280	1.00	-.346
28	.175	.328	-.346	1.00

Station #3 -- Factor #1

	RESPONDENT NUMBER									
	2	4	5	7	15	19	20	21	22	25
2	1.00	.59	.55	.56	.32	.39	.34	.31	.31	.46
4	.59	1.00	.67	.52	.44	.49	.45	.47	.52	.45
5	.55	.67	1.00	.57	.32	.41	.49	.56	.41	.49
7	.56	.52	.57	1.00	.28	.37	.50	.48	.33	.32
15	.32	.44	.32	.28	1.00	.26	.42	.32	.24	.10
19	.39	.49	.41	.37	.26	1.00	.44	.38	.41	.35
20	.34	.45	.49	.50	.42	.44	1.00	.56	.35	.22
21	.31	.47	.56	.48	.32	.38	.56	1.00	.36	.34
22	.31	.52	.41	.33	.24	.41	.35	.36	1.00	.12
25	.46	.45	.49	.32	.10	.35	.22	.34	.12	1.00

Station #3 -- Factor #3

RESPONDENT NUMBER				
	9	16	22	25
9	1.00	-.245	-.118	.166
16	-.245	1.00	.223	-.315
22	-.118	.223	1.00	.127
25	.166	-.315	.127	1.00

Station #3 -- Factor #4

RESPONDENT NUMBER			
	3	14	24
3	1.00	.153	-.302
14	.153	1.00	-.223
24	-.302	-.223	1.00

Station #3 -- Factor #5

RESPONDENT NUMBER		
	11	17
11	1.00	.381
17	.381	1.00

Station #3 -- Factor #6

RESPONDENT NUMBER			
	21	26	31
21	1.00	-.364	.166
26	-.364	1.00	-.311
31	.166	-.311	1.00

Station #3 -- Factor #7

RESPONDENT NUMBER

	18	23
18	1.00	-.359
23	-.359	1.00

Station #3 -- Factor #8

RESPONDENT NUMBER

	1	5	6	13	15	20	30
1	1.00	.451	.508	-.307	.254	.328	.355
5	.451	1.00	.539	-.425	.328	.491	.491
6	.508	.539	1.00	-.429	.302	.416	.311
13	-.307	-.425	-.429	1.00	-.390	-.460	-.504
15	.254	.328	.302	-.390	1.00	.421	.254
20	.328	.491	.416	-.460	.421	1.00	.416
30	.355	.491	.311	-.504	.254	.416	1.00

Station #3 -- Factor #9

RESPONDENT NUMBER

	8	27
8	1.00	.438
27	.438	1.00

Station #3 -- Factor #10

RESPONDENT NUMBER

	12	15	29
12	1.00	-.065	-.350
15	-.065	1.00	.078
29	-.350	.078	1.00

Station #4 -- Factor #1 (on following page)

Station #4 -- Factor #2

RESPONDENT NUMBER

	25	31
25	1.00	-.324
31	-.324	1.00

Station #4 -- Factor #3 (on page 242)

Station #4 -- Factor #4 (on page 243)

Station #4 -- Factor #5

RESPONDENT NUMBER

	21	22	26	30
21	1.00	.557	.425	.421
22	.557	1.00	.355	.530
26	.425	.355	1.00	.583
30	.421	.530	.583	1.00

Station #5 -- Factor #1 (on page 245)

Station #5 -- Factor #2

RESPONDENT NUMBER

	3	9	10	23	28
3	1.00	.293	.364	-.381	.293
9	.293	1.00	.451	-.508	.460
10	.364	.451	1.00	-.539	.307
23	-.381	-.508	-.539	1.00	-.228
28	.293	.460	.307	-.228	1.00

Station #4 -- Factor #1

	RESPONDENT NUMBER															
	2	3	4	5	7	9	14	15	16	18	20	24	26	28	29	30
2	1.00	.58	.61	.69	.51	.61	.50	.61	.60	.51	.54	.47	.23	.64	.62	.49
3	.58	1.00	.68	.65	.68	.64	.53	.66	.50	.50	.62	.44	.35	.64	.71	.53
4	.61	.68	1.00	.78	.65	.70	.41	.67	.55	.57	.59	.47	.35	.57	.57	.49
5	.69	.65	.78	1.00	.75	.71	.64	.68	.59	.65	.71	.51	.42	.71	.71	.58
7	.51	.68	.65	.75	1.00	.62	.62	.63	.43	.51	.51	.54	.25	.63	.61	.50
9	.61	.64	.70	.71	.62	1.00	.60	.69	.56	.67	.62	.57	.35	.57	.71	.55
14	.50	.53	.41	.64	.62	.60	1.00	.62	.55	.64	.58	.46	.35	.57	.63	.57
15	.61	.66	.67	.68	.63	.69	.62	1.00	.50	.64	.56	.56	.34	.68	.77	.57
16	.60	.50	.55	.59	.43	.56	.55	.50	1.00	.46	.55	.49	.32	.50	.57	.50
18	.51	.50	.57	.65	.51	.67	.64	.64	.46	1.00	.57	.48	.39	.58	.68	.59
20	.54	.62	.69	.71	.51	.62	.58	.56	.55	.57	1.00	.42	.32	.65	.64	.54
24	.47	.44	.47	.51	.54	.57	.46	.56	.49	.48	.42	1.00	.29	.50	.42	.48
26	.23	.35	.35	.42	.25	.35	.35	.34	.32	.39	.32	.29	1.00	.49	.41	.58
28	.64	.64	.57	.71	.63	.57	.57	.68	.50	.58	.65	.50	.49	1.00	.72	.58
29	.62	.71	.57	.71	.61	.71	.63	.77	.57	.68	.64	.42	.41	.72	1.00	.57
30	.49	.53	.49	.58	.50	.55	.57	.57	.50	.59	.54	.48	.58	.50	.57	1.00

Station #4 -- Factor #3

	RESPONDENT NUMBER															
	1	5	6	7	8	11	12	13	15	17	19	22	23	24	28	29
1	1.00	.66	.70	.58	.45	.62	.55	-.55	.74	.67	-.53	.57	-.58	.56	.58	.64
5	.66	1.00	.62	.75	.57	.64	.58	-.53	.68	.63	-.69	.60	-.70	.51	.71	.71
6	.70	.62	1.00	.57	.56	.59	.60	-.62	.76	.76	-.57	.64	-.60	.55	.64	.65
7	.58	.75	.57	1.00	.58	.62	.52	-.52	.63	.66	-.69	.47	-.54	.54	.63	.61
8	.45	.57	.56	.58	1.00	.54	.61	-.48	.56	.56	-.55	.45	-.46	.56	.42	.42
11	.62	.64	.59	.62	.54	1.00	.41	-.57	.61	.60	-.42	.54	-.60	.35	.47	.60
12	.55	.58	.60	.52	.61	.41	1.00	-.48	.57	.55	-.53	.48	-.43	.63	.58	.54
13	-.55	-.53	-.62	-.52	-.48	-.57	-.48	1.00	-.67	-.62	.56	-.56	.53	-.46	-.54	-.65
15	.74	.68	.76	.63	.56	.61	.57	-.67	1.00	.71	-.65	.58	-.67	.56	.68	.77
17	.67	.63	.76	.66	.56	.60	.55	-.62	.71	1.00	-.54	.65	-.63	.52	.71	.61
19	-.53	-.69	-.57	-.69	-.55	-.42	-.53	.56	-.65	-.54	1.00	-.55	.59	-.54	-.63	-.59
22	.57	.60	.64	.47	.45	.54	.48	-.56	.58	.65	-.55	1.00	-.52	.40	.55	.59
23	-.58	-.07	-.60	-.54	-.46	-.60	-.43	.53	-.67	-.63	.59	-.52	1.00	-.37	-.60	-.66
24	.56	.51	.55	.54	.56	.35	.63	-.46	.56	.52	-.54	.40	-.37	1.00	.50	.42
28	.58	.71	.64	.63	.42	.47	.58	-.54	.68	.71	-.63	.55	-.60	.50	1.00	.72
29	.64	.71	.65	.61	.42	.60	.54	0.65	.77	.61	-.59	.59	-.66	.42	.72	1.00

Station #4 -- Factor #4

RESPONDENT NUMBER																	
	1	2	3	4	5	6	9	10	13	15	17	19	22	23	27	28	29
1	1.00	.64	.71	.66	.66	.70	.68	.50	-.55	.74	.67	-.53	.57	-.58	.49	.58	.64
2	.64	1.00	.58	.61	.69	.54	.61	.46	-.50	.61	.59	-.52	.50	-.56	.55	.64	.62
3	.71	.58	1.00	.68	.65	.62	.64	.55	-.65	.66	.66	-.58	.52	-.55	.63	.64	.71
4	.66	.61	.68	1.00	.78	.55	.70	.44	-.62	.67	.51	-.72	.48	-.64	.57	.57	.57
5	.66	.69	.65	.78	1.00	.62	.71	.42	-.53	.68	.63	-.69	.60	-.72	.57	.71	.71
6	.70	.54	.62	.55	.62	1.00	.55	.51	-.62	.76	.76	-.57	.64	-.60	.46	.64	.65
9	.68	.61	.64	.70	.71	.55	1.00	.46	-.52	.69	.56	-.61	.42	-.66	.58	.57	.71
10	.50	.46	.55	.44	.42	.51	.46	1.00	-.30	.42	.47	-.41	.38	-.54	.41	.45	.47
13	-.55	-.50	-.65	-.62	-.53	-.62	-.52	-.30	1.00	-.67	-.62	.56	-.56	.53	-.56	-.54	-.65
15	.74	.61	.66	.67	.68	.76	.69	.42	.67	1.00	.71	-.65	.58	-.67	.47	.68	.77
17	.67	.59	.66	.51	.63	.76	.56	.47	-.62	.71	1.00	-.54	.65	-.63	.50	.71	.61
19	-.53	-.52	-.58	-.72	-.69	-.57	-.61	-.41	.56	-.65	-.54	1.00	-.55	.59	-.58	-.63	-.59
22	.57	.50	.52	.48	.60	.64	.42	.38	-.56	.58	.65	-.55	1.00	-.52	.44	.55	.59
23	-.58	-.56	-.55	-.64	-.72	-.60	-.66	-.54	.53	-.67	-.63	.59	-.52	1.00	-.57	-.60	-.66

Station #4 -- Factor #4 (continued)

RESPONDENT NUMBER

	1	2	3	4	5	6	9	10	13	15	17	19	22	23	27	28	29
.																	
.																	
.																	
27	.49	.55	.63	.57	.57	.46	.58	.41	-.56	.47	.50	-.58	.44	-.57	1.00	.52	.54
28	.58	.64	.64	.57	.71	.64	.57	.45	-.54	.68	.71	-.63	.55	-.60	.52	1.00	.72
29	.64	.62	.71	.57	.71	.65	.71	.47	-.65	.77	.61	-.59	.59	-.66	.54	.72	1.00

Station #5 -- Factor #1

	RESPONDENT NUMBER														
	1	3	5	6	8	13	14	19	20	21	24	26	27	30	31
1	1.00	-.57	.37	.48	.33	-.55	.37	-.43	-.40	.41	.32	.62	.55	.34	.41
3	-.57	1.00	-.20	-.35	-.16	.49	-.24	.35	.45	-.41	-.20	-.43	-.30	-.16	-.40
5	.37	-.20	1.00	.36	.40	-.46	.24	-.46	-.32	.44	.18	.44	.27	.41	.42
6	.48	-.35	.36	1.00	.20	-.57	.34	-.59	-.28	.35	.28	.51	.49	.31	.33
8	.35	-.16	.40	.20	1.00	-.49	.39	-.48	-.25	.50	.22	.42	.35	.32	.23
13	-.55	.49	-.46	-.57	-.49	1.00	-.25	.63	.50	-.58	-.36	-.67	-.46	-.49	-.46
14	.37	-.24	.24	.34	.39	-.25	1.00	-.26	-.21	.39	.09	.31	.36	.28	.20
19	-.43	.35	-.46	-.59	-.48	.63	-.26	1.00	.28	-.50	-.39	-.57	-.43	-.30	-.44
20	-.40	.45	-.32	-.28	-.25	.50	.24	.28	1.00	-.39	-.24	-.35	-.28	-.26	-.33
21	.41	-.41	.44	.35	.50	-.58	.39	-.50	-.39	1.00	.39	.54	.59	.38	.21
24	.32	-.20	.18	.28	.22	-.36	.09	-.39	-.24	.39	1.00	.47	.45	.30	.17
26	.62	-.43	.44	.51	.42	-.67	.31	-.57	-.35	.54	.47	1.00	.52	.49	.36
27	.55	-.30	.27	.49	.35	-.46	.36	-.43	-.28	.59	.45	.52	1.00	.31	.20
30	.34	-.16	.41	.31	.32	-.49	.28	-.30	-.26	.38	.30	.49	.31	1.00	.29
31	.41	-.40	.42	.33	.23	-.46	.20	-.44	-.33	.21	.17	.36	.20	.29	1.00

Station #5 -- Factor #3

RESPONDENT NUMBER			
	7	14	15
7	1.00	.399	.197
14	.399	1.00	.271
15	.197	.271	1.00

Station #5 -- Factor #4

RESPONDENT NUMBER		
	12	18
12	1.00	-.153
18	-.153	1.00

Station #5 -- Factor #5

RESPONDENT NUMBER		
	4	6
4	1.00	.478
6	.478	1.00

Station #5 -- Factor #6

RESPONDENT NUMBER			
	17	22	29
17	1.00	.421	.298
22	.421	1.00	.078
29	.298	.078	1.00

Station #5 -- Factor #7

RESPONDENT LOADING
INSIGNIFICANT FACTOR

Station #5 -- Factor #8

RESPONDENT NUMBER

	12	25	29	30
12	1.00	.368	-.184	.324
25	.368	1.00	-.293	.311
29	-.184	-.293	1.00	-.298
30	.324	.311	-.298	1.00

Station #5 -- Factor #9

RESPONDENT LOADING
INSIGNIFICANT FACTOR

Station #5 -- Factor #10

RESPONDENT NUMBER

	2	22
2	1.00	.175
22	.175	1.00

APPENDIX I

LOADINGS AND WEIGHTS OF RESPONDENTS
WITH SIGNIFICANT LOADINGS ON EACH FACTOR

STATION #1			
<u>Factor</u>	<u>Respondent</u>	<u>Loading</u>	<u>Weight</u>
I	1	.79	2.10
	4	.41	.49
	6	.49	.64
	7	.41	.49
	8	.74	1.63
	9	.52	.71
	11	.59	.90
	13	-.41	.49
	14	.70	1.37
	17	.80	2.22
	24	.73	1.56
	27	.44	.62
	28	.45	.56
	30	.67	1.21
II	2	.73	1.56
	15	.73	1.56
III	3	-.68	1.07
	5	-.71	1.43
	7	-.41	.49
	9	-.53	.73
	11	-.42	.51
	13	.62	1.00
	18	-.46	.58
	19	-.53	.73
	20	-.73	1.56
	21	-.67	1.21
	26	-.56	.82
	27	-.50	.67
	28	-.56	.82
IV	4	.61	.97
	10	-.76	1.79
	23	.60	.93

<u>Factor</u>	<u>Respondent</u>	<u>Loading</u>	<u>Weight</u>
V	7	-.48	.62
	29	-.82	2.26
VI	12	.66	1.16
	25	-.64	1.08
VII	16	-.65	1.12
	26	.65	1.12
	31	-.49	.64
VIII	22	.86	3.29
	31	.41	.49

STATION #2

I	4	-.70	1.37
	5	-.71	1.43
	6	-.78	1.98
	7	-.79	2.10
	8	-.77	2.50
	9	-.46	.58
	10	.63	1.04
	12	-.78	1.98
	13	.60	.93
	14	-.54	.76
	17	-.59	.90
	18	-.62	1.00
	19	-.64	1.08
	20	-.76	1.79
	21	-.54	.76
	27	-.47	.60
	29	-.55	.78
	30	-.60	.93

<u>Factor</u>	<u>Respondent</u>	<u>Loading</u>	<u>Weight</u>
II	3	.84	2.84
	9	.53	.73
	11	.81	2.35
	27	.48	.62
	28	.48	.62
III	2	.46	.58
	31	-.83	2.66
IV	25	.79	2.10
	27	-.51	.68
V	23	.83	2.66
VI	1	-.46	.58
	15	-.51	.68
	16	.80	2.22
	26	-.41	.49
VII	2	-.46	.58
	24	-.84	2.84
	26	.52	.71
VIII	13	.47	.60
	15	-.40	.47
	22	-.87	3.48
STATION #3			
I	2	.72	1.49
	4	.83	2.57
	5	.72	1.49
	7	.67	1.21
	15	.40	.47
	19	.59	.90
	20	.46	.58
	21	.53	.73
	22	.56	.81
	25	.53	.73

<u>Factor</u>	<u>Respondent</u>	<u>Loading</u>	<u>Weight</u>
II	3	.40	.47
	10	.56	.81
	23	-.63	1.04
	28	.73	1.55
III	9	-.41	.49
	16	.81	2.35
	22	.51	.68
	25	-.45	.56
IV	3	-.51	.68
	14	-.41	.49
	24	.80	2.22
V	11	.85	3.05
	17	.54	.76
VI	21	-.40	.47
	26	.68	1.27
	31	-.79	2.10
VII	18	-.83	2.57
	23	.44	.54
VIII	1	-.61	.97
	5	-.44	.54
	6	-.63	1.04
	13	.76	1.79
	15	-.41	.49
	20	-.43	.52
	30	-.53	.73
IX	8	.73	1.55
	27	.83	2.57
X	12	.74	1.63
	15	-.47	.60
	29	-.61	.97

<u>Factor</u>	<u>Respondent</u>	<u>Loading</u>	<u>Weight</u>
	STATION #4		
I	2	.49	.64
	3	.40	.47
	4	.46	.58
	5	.59	.90
	7	.41	.49
	9	.61	.97
	14	.67	1.21
	15	.44	.54
	16	.67	1.21
	18	.78	1.98
	20	.65	1.12
	24	.43	.52
	26	.41	.49
	28	.52	.82
	29	.51	.68
	30	.55	.78
II	25	-.79	2.10
	31	.67	1.21
III	1	-.48	.62
	5	-.45	.56
	6	-.66	1.16
	7	-.54	.76
	8	-.72	1.49
	11	-.71	1.43
	12	-.72	1.49
	13	.52	.82
	15	-.59	.90
	17	-.64	1.08
	19	.42	.50
	22	-.53	.73
	23	.44	.54
	24	-.47	.60
	28	-.41	.49
	29	-.41	.49

<u>Factor</u>	<u>Respondent</u>	<u>Loading</u>	<u>Weight</u>
IV	1	.52	.82
	2	.52	.82
	3	.54	.76
	4	.54	.76
	5	.41	.49
	6	.46	.58
	9	.43	.52
	10	.80	2.22
	13	.40	.47
	15	.44	.54
	17	.46	.58
	19	.40	.47
	22	.44	.54
	23	.61	.97
	27	.50	.66
	28	.40	.47
	29	.50	.66
V	21	.73	1.55
	22	.48	.62
	26	.66	1.16
	30	.51	.68
STATION #5			
I	1	-.78	1.98
	3	.59	.90
	5	-.55	.78
	6	-.57	.84
	8	-.57	.84
	13	.79	2.10
	14	-.51	.69
	19	.61	.97
	20	.62	1.00
	21	-.73	1.55
	24	-.51	.69
	26	-.81	1.37

<u>Factor</u>	<u>Respondent</u>	<u>Loading</u>	<u>Weight</u>
	27	-.69	1.31
	30	-.49	.64
	31	-.44	.54
II	3	.41	.49
	9	.76	1.15
	10	.63	.89
	23	-.80	2.16
	28	.60	.93
III	7	-.41	.49
	14	-.41	.49
	15	-.85	3.05
IV	12	.47	.60
	18	-.83	2.66
V	4	-.85	3.05
	6	-.42	.50
VI	17	.85	3.05
	22	.67	1.21
	29	.44	.54
VII	11	INSIGNIFICANT FACTOR	
VIII	12	.45	.56
	25	.81	2.35
	29	-.57	.84
	30	.54	.76
IX	16	INSIGNIFICANT FACTOR	
X	2	.80	2.22
	22	.40	.47

APPENDIX J
PROTOTYPICAL Q-SORTS

STATION #1

FACTOR #2

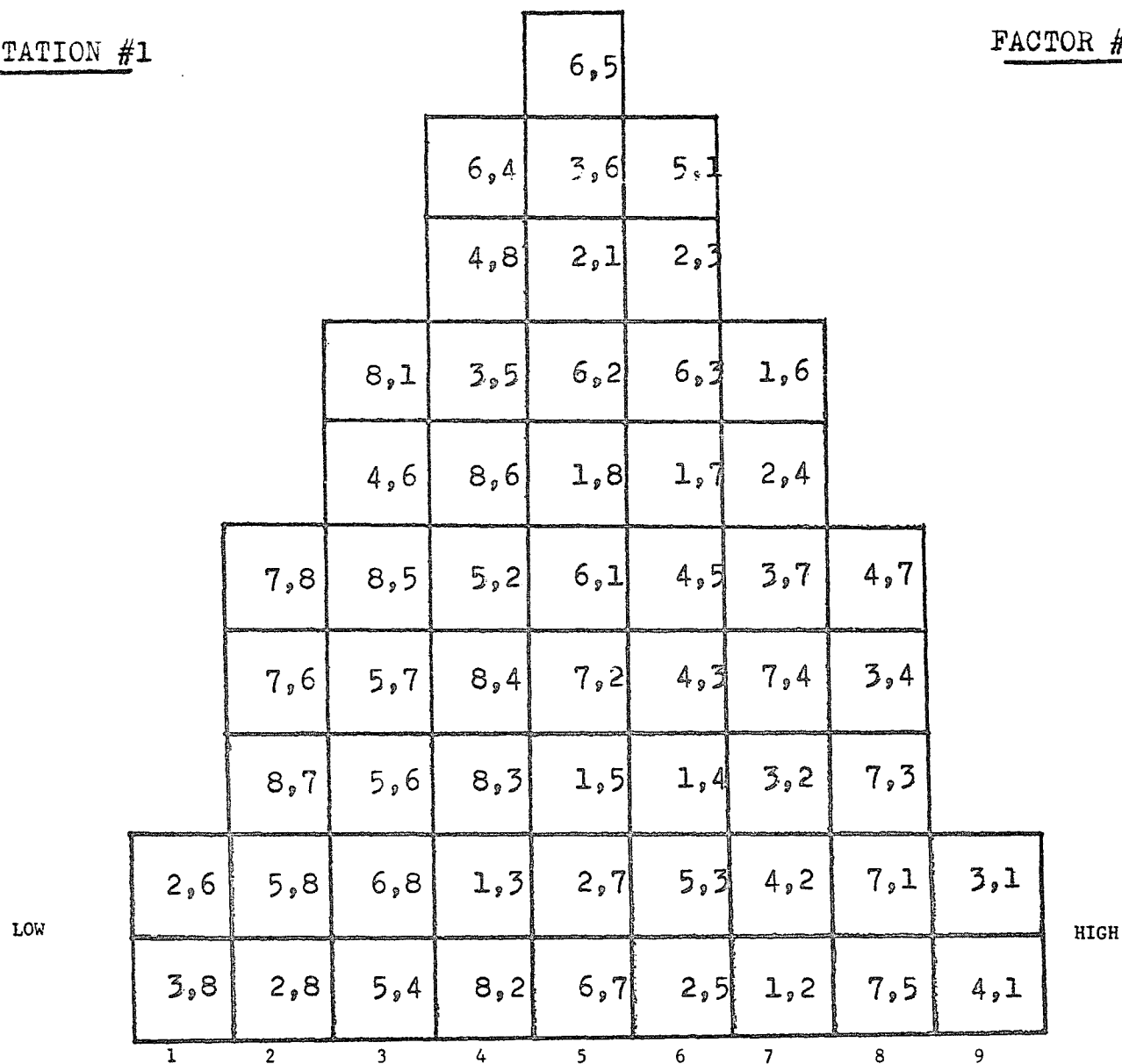
STATION #1

FACTOR #

				3,8					
			2,6	1,8	5,6				
			6,5	4,6	2,3				
		7,8	6,2	8,3	8,7	3,7			
		6,4	4,7	7,6	7,4	2,4			
	4,8	6,1	1,7	3,5	7,3	2,1	5,7		
	4,5	4,3	8,6	8,4	3,1	3,2	2,5		
	2,8	1,5	1,6	4,2	7,1	6,3	5,1		
LOW	3,6	2,7	1,4	6,8	8,2	1,3	8,5	5,8	5,4
	1,2	8,1	4,1	6,7	3,4	5,2	7,2	5,3	7,5
	1	2	3	4	5	6	7	8	9
									HIGH

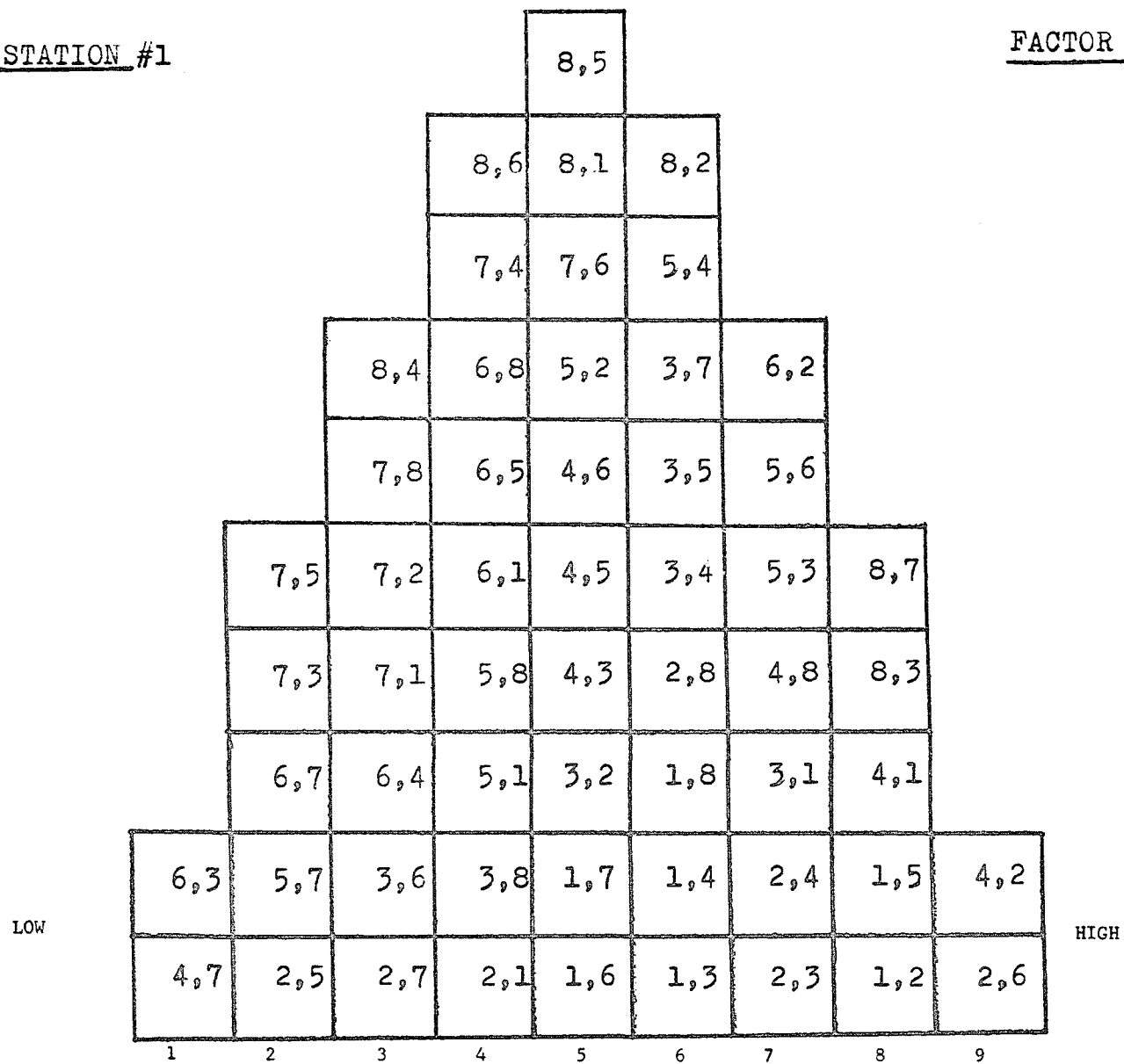
STATION #1

FACTOR #3



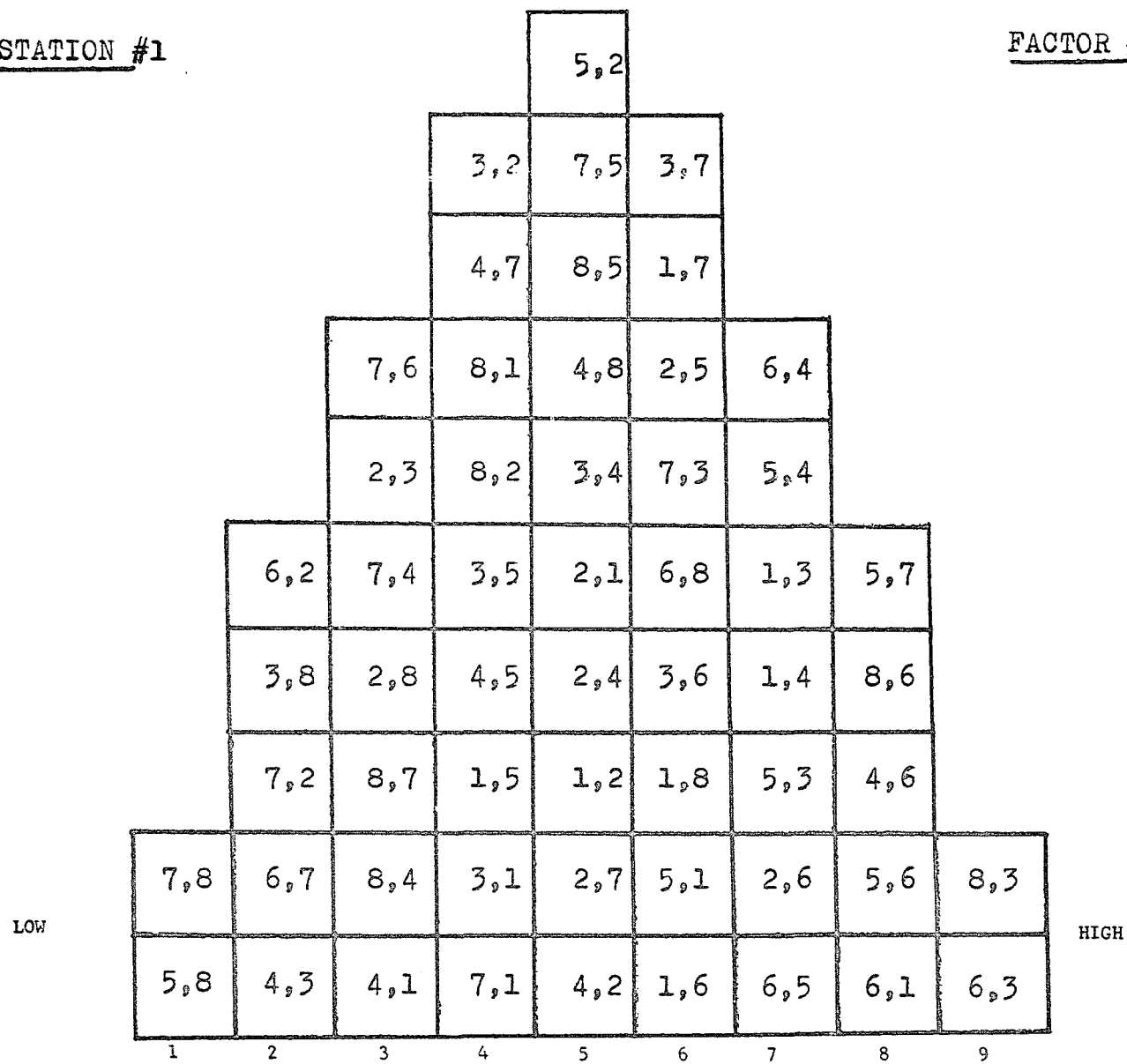
STATION #1

FACTOR #4



STATION #1

FACTOR #5



STATION #1

FACTOR #6

STATION #1

FACTOR

				8,4					
			8,1	7,6	8,7				
			7,4	7,1	8,2				
		7,5	7,3	6,8	6,7	8,5			
		6,5	5,8	5,7	5,2	8,3			
	8,6	5,6	4,8	5,1	3,4	5,4	7,8		
	7,2	5,3	4,5	4,1	2,8	4,7	6,1		
	6,4	3,5	4,3	3,8	2,4	3,2	4,6		
6,3	3,7	1,8	2,7	1,7	2,3	2,6	3,6	6,2	
1,5	3,1	1,6	1,3	1,2	1,4	2,1	2,5	4,2	
1	2	3	4	5	6	7	8	9	

LOW

HIGH

STATION #1

FACTOR #7

				8,4				
			5,2	7,3	8,7			
			8,6	6,4	7,4			
		8,2	8,3	6,2	6,8	8,1		
		7,8	6,5	6,1	5,6	7,5		
	7,6	6,3	5,7	8,5	5,1	7,2	6,7	
	4,8	5,8	3,7	4,2	4,1	5,3	4,7	
	4,5	3,8	3,4	2,8	3,6	4,6	2,5	
5,4	3,1	2,4	2,6	2,7	2,1	3,5	1,7	7,1
2,3	1,8	1,6	1,3	1,4	1,5	3,2	1,2	4,3
1	2	3	4	5	6	7	8	9

LOW

HIGH

STATION #1

FACTOR #8

				6,4				
			5,3	8,7	2,6			
			1,3	2,7	5,6			
		7,1	2,5	7,2	4,5	8,1		
		5,7	8,5	8,4	4,7	1,7		
	7,8	7,5	4,6	1,2	6,7	7,6	1,8	
	5,1	2,1	8,3	4,8	1,5	5,2	3,2	
	3,6	6,1	6,8	2,4	5,8	5,4	3,1	
3,4	7,4	2,8	3,8	4,2	8,2	7,3	2,3	3,5
3,7	1,4	1,6	8,6	4,3	6,5	6,2	4,1	6,3
1	2	3	4	5	6	7	8	9

LOW

HIGH

STATION #2

FACTOR #1

				8,3				
			8,6	6,5	7,5			
			8,2	6,4	7,2			
		7,6	5,4	6,3	5,1	7,1		
		6,7	4,8	5,7	2,5	4,7		
	8,5	6,2	4,3	5,3	2,1	4,5	7,4	
	8,4	6,1	3,6	5,2	1,7	4,2	7,3	
	7,8	5,8	2,8	4,6	1,6	3,7	3,2	
8,7	6,8	5,6	1,8	3,5	1,5	3,1	2,3	4,1
8,1	3,8	2,6	1,3	2,7	1,4	2,4	1,2	3,4
1	2	3	4	5	6	7	8	9

LOW

HIGH

STATION #2

FACTOR #2

				5,1					
			8,6	8,7	3,7				
			5,2	6,4	1,3				
		6,8	4,3	1,6	5,3	3,8			
		7,4	6,3	8,3	6,7	3,4			
	1,5	3,6	5,7	4,2	2,4	6,2	8,2		
	5,6	2,5	8,1	8,5	1,7	1,2	7,2		
	3,5	6,1	4,6	2,1	4,8	2,6	3,2		
7,8	5,4	4,5	7,6	2,8	7,1	2,3	1,8	4,1	
6,5	4,7	5,8	1,4	2,7	8,4	3,1	7,5	7,3	
1	2	3	4	5	6	7	8	9	

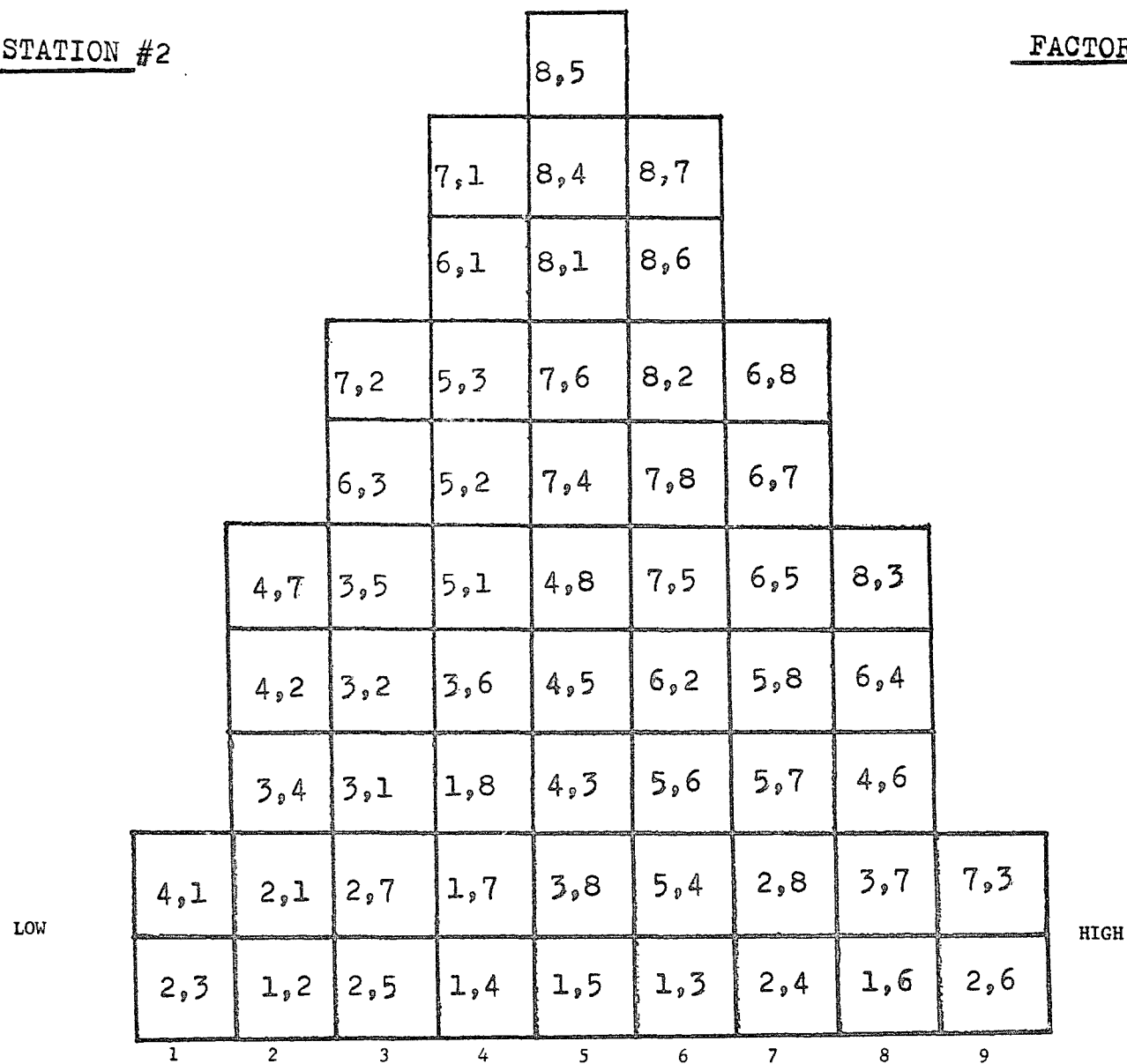
LOW

HIGH

STATION #2		FACTOR #3	
LOW	5,7	8,4	8,5
	4,3	7,5	8,7
			7,8
			6,3
		6,4	7,6
		4,1	7,2
		3,5	6,8
		2,7	8,1
		1,5	6,5
		4,6	5,4
		3,8	6,2
		2,5	5,6
		1,7	4,7
		4,5	3,7
		3,6	4,8
		1,2	1,8
		1,5	2,8
		1,3	8,2
		2,1	3,1
		3,2	2,4
		4,3	7,3
		2,6	7,1
		1,4	
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		369,362	
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		371,364	
		372,365	
		373,366	
		374,367	
		375,368	

STATION #2

FACTOR #6



STATION #2

FACTOR #8

STATION #2

FACTOR

				5,3				
			1,8	8,4	7,5			
			4,5	7,6	7,2			
		6,3	4,6	6,1	1,6	2,1		
		5,2	8,7	1,2	5,4	6,5		
	5,1	8,5	6,7	8,1	7,8	2,7	3,2	
	6,2	5,6	8,6	4,7	7,1	3,5	1,5	
	6,8	8,3	7,4	5,8	2,5	4,2	2,3	
3,4	4,8	2,8	13	1,4	1,7	3,1	4,1	2,4
2,6	3,6	5,7	6,4	3,8	8,2	7,3	4,3	3,7
1	2	3	4	5	6	7	8	9

LOW

HIGH

STATION #3

FACTOR #1

				7,5					
			8,1	8,5	5,4				
			8,3	5,2	1,6				
		5,6	7,6	6,5	2,4	4,2			
		4,8	8,6	3,6	5,3	1,7			
	1,3	3,8	6,7	2,5	2,1	5,1	7,1		
	1,8	8,2	6,3	4,3	4,5	3,2	3,1		
	6,8	6,1	6,2	1,4	3,5	1,5	7,4		
7,8	2,8	2,6	6,4	5,7	1,2	2,3	3,7	7,3	
8,7	5,8	8,4	4,6	2,7	7,2	4,7	3,4	4,1	
1	2	3	4	5	6	7	8	9	

LOW

HIGH

STATION #3

FACTOR #2

				8,4					
			6,4	7,6	8,7				
			4,2	7,4	8,2				
		8,3	3,6	7,2	8,1	8,6			
		7,1	3,4	6,3	7,8	7,3			
	8,5	4,7	2,7	6,1	5,6	6,8	7,5		
	6,2	3,8	2,5	4,8	4,5	6,5	5,7		
	4,3	1,7	2,4	3,1	3,7	5,8	5,3		
4,1	2,3	1,6	1,5	5,2	2,8	5,4	5,1	6,7	
3,2	1,8	1,2	1,4	2,1	2,6	4,6	3,5	1,3	
1	2	3	4	5	6	7	8	9	

LOW

HIGH

STATION #3

FACTOR #3

				8,5				
			8,1	5,2	7,8			
			7,2	5,1	6,8			
		8,7	6,4	4,6	3,7	8,6		
		7,5	6,2	3,8	3,6	6,7		
	8,4	5,4	6,1	3,5	3,4	6,5	6,3	
	8,3	4,1	4,8	3,2	2,6	5,3	5,8	
	8,2	3,1	4,5	2,8	2,5	4,3	5,6	
7,3	7,6	2,4	2,7	2,1	1,7	1,4	4,7	7,4
1,8	5,7	2,3	1,6	1,5	1,3	1,2	4,2	7,1
1	2	3	4	5	6	7	8	9

LOW

HIGH

STATION #3

FACTOR #3

STATION #3

FACTOR

				8,4					
			8,3	7,6	8,5				
			8,2	7,3	7,5				
		8,1	6,4	6,2	6,8	7,8			
		7,2	5,7	5,2	5,4	7,1			
	8,6	6,7	3,7	4,8	5,1	5,8	8,7		
	7,4	6,1	3,1	3,8	4,3	4,5	5,3		
	6,3	4,7	2,4	2,7	2,8	4,1	4,6		
3,2	4,2	3,4	1,6	1,7	1,8	2,5	3,5	6,5	
2,3	3,6	2,1	1,2	1,4	1,3	1,5	2,6	5,6	
1	2	3	4	5	6	7	8	9	

LOW

HIGH

STATION #3

FACTOR #6

				8,3					
			8,7	7,3	8,5				
			8,4	6,1	8,2				
		7,8	8,1	5,8	7,5	7,1			
		7,6	6,4	5,4	7,4	6,3			
	7,2	6,7	6,2	4,8	5,3	4,6	8,6		
	6,5	5,6	3,7	3,1	5,2	3,6	4,7		
	2,1	2,8	4,3	2,7	3,8	3,5	4,5		
6,8	1,5	2,6	4,2	2,3	3,7	3,2	3,4	5,1	
1,4	1,2	1,3	1,7	1,8	1,6	2,5	2,4	4,1	
1	2	3	4	5	6	7	8	9	

LOW

HIGH

STATION #3

FACTOR #7

				8,6					
			8,5	6,5	8,1				
			7,8	6,4	7,1				
		7,2	6,3	5,8	5,4	8,2			
		4,5	6,2	4,8	5,1	7,6			
	7,4	4,1	6,1	3,6	4,2	7,5	8,4		
	4,3	3,5	5,2	2,4	3,8	6,7	8,3		
	2,8	3,1	3,7	2,1	3,4	5,7	7,3		
LOW	4,7	2,3	1,8	2,6	1,6	3,2	5,6	5,3	8,7
	4,6	1,4	1,5	2,5	1,2	1,7	2,7	1,3	6,8
	1	2	3	4	5	6	7	8	9
									HIGH

STATION #3

FACTOR #9

				2,5				
			2,1	6,8	8,6			
			6,1	4,5	6,7			
		8,3	1,8	8,5	7,4	6,2		
		6,5	4,7	5,4	2,7	3,1		
	4,3	3,7	5,2	1,7	1,3	2,8	5,1	
	5,6	2,3	7,1	4,8	2,4	6,3	1,6	
	8,1	3,8	4,1	1,5	3,5	5,8	7,8	
1,4	3,6	8,7	8,4	4,2	7,6	5,7	7,2	1,2
3,4	3,2	4,6	8,2	2,6	6,4	7,5	7,3	5,3
1	2	3	4	5	6	7	8	9

LOW

HIGH

STATION #3

FACTOR #10

STATION #3										FACTOR 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STATION #4

FACTOR #1

				6,3						
			8,3	5,2	2,7					
			5,6	6,4	5,4					
		2,8	4,6	6,2	5,3	3,1				
		4,8	1,8	7,5	2,5	4,5				
	7,8	5,8	6,7	1,4	1,7	3,2	2,3			
	8,7	3,8	6,5	3,6	5,1	2,4	4,7			
	8,5	2,6	1,3	3,5	2,1	1,6	3,7			
LOW	8,6	6,8	8,2	7,6	7,1	1,5	4,2	7,3	3,4	
	8,1	8,4	4,3	6,1	7,2	5,7	1,2	7,4	4,1	HIGH
	1	2	3	4	5	6	7	8	9	

STATION #4

FACTOR #2

STATION #4

FACTOR

				8,6				
			8,7	6,4	8,1			
			8,5	5,6	7,1			
		7,8	8,3	5,3	5,2	6,7		
		7,2	8,2	4,7	4,2	5,8		
	8,4	6,8	7,5	4,6	3,6	5,4	7,6	
	6,3	6,2	7,4	3,8	3,5	4,8	7,3	
	6,1	5,7	4,1	2,8	3,4	3,2	3,7	
4,3	2,7	5,1	2,5	1,7	2,6	3,1	2,3	6,5
1,8	2,4	1,5	1,3	1,2	1,4	2,1	1,6	4,5
1	2	3	4	5	6	7	8	9

LOW

HIGH

7.5

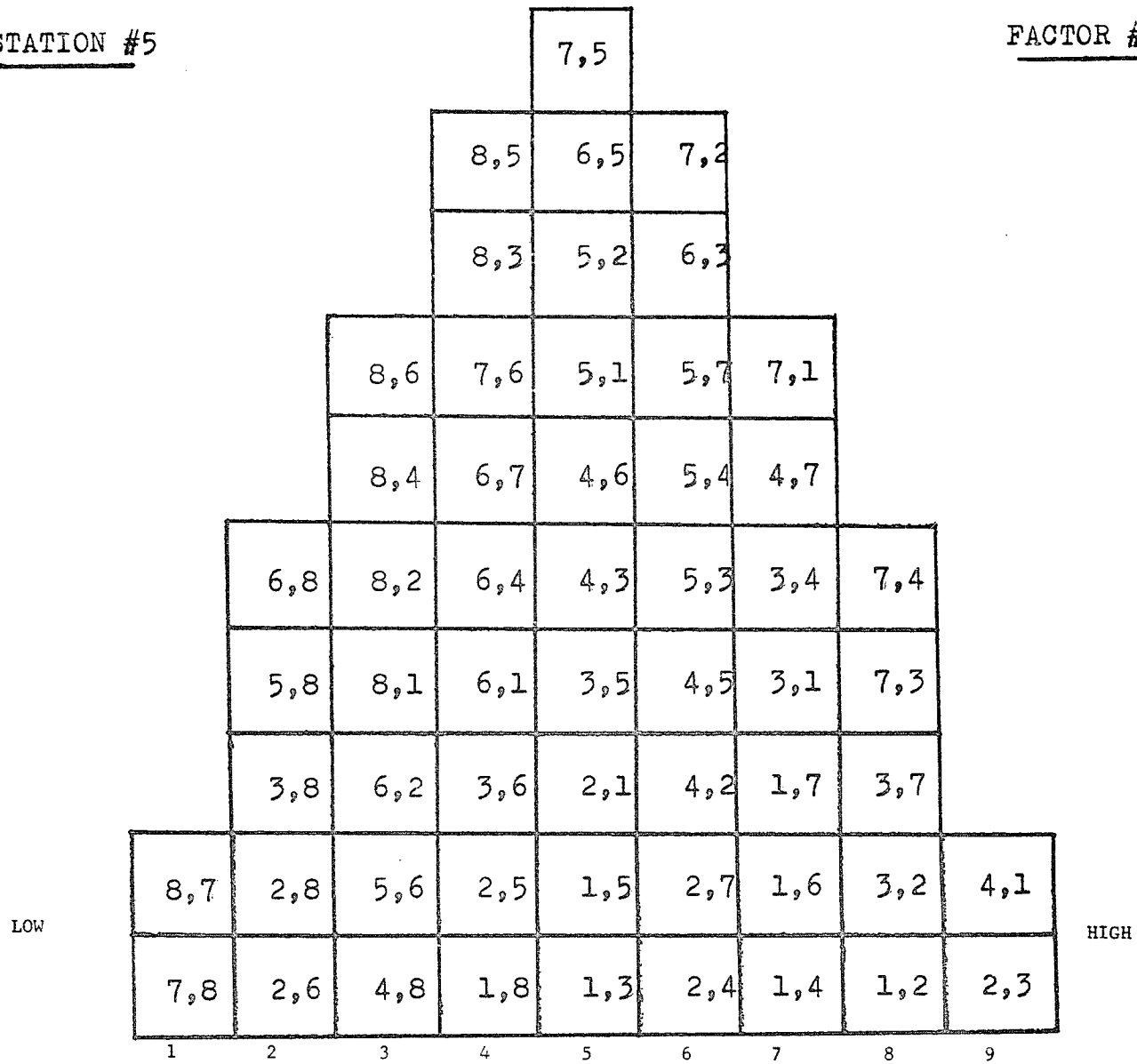
5,8	2,6	1,8	2,5	1,3	1,7	1,2	3,2	3,4
7,8	2,8	5,7	4,8	1,5	2,1	1,4	3,7	4,1
	3,8	6,1	5,2	3,5	2,7	1,6	4,2	
	8,1	6,8	5,4	3,6	3,1	2,3	4,7	
	8,7	8,2	5,6	4,3	4,5	2,4	7,4	
		8,4	6,2	5,1	4,6	7,1		
	8,5	7,6	5,3	6,5	7,3			
		8,3	6,3	6,7				
	8,6	6,4	7,2					

FACTOR #5

<u>STATION #4</u>		<u>FACTOR #5</u>	
LOW	1	8,5	2,6
	2	3,8	4,8
	3	6,4	6,2
	4	6,5	2,1
	5	1,5	6,7
	6	4,2	5,3
	7	3,2	1,4
	8	2,4	7,4
	9	4,1	3,1
HIGH	1	8,7	5,8
	2	3,8	4,8
	3	6,4	6,2
	4	6,8	2,1
	5	8,3	6,7
	6	3,7	5,3
	7	4,7	1,4
	8	5,4	7,4
	9	1,7	3,1

STATION #5

FACTOR #1



STATION #5

FACTOR #2

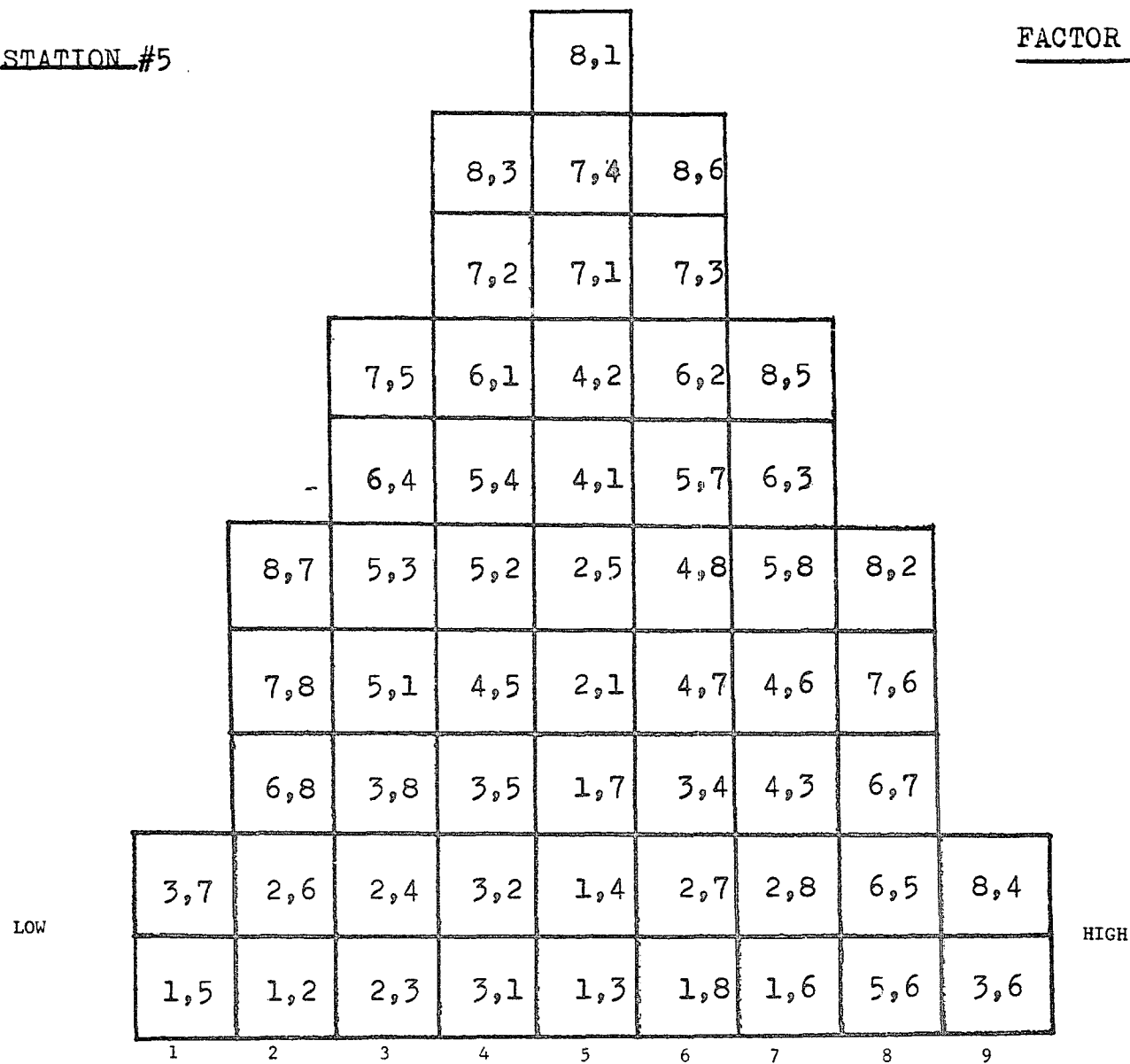
				8,4						
			8,7	8,2	8,6					
			8,5	6,2	7,4					
		8,1	8,3	6,1	7,1	6,5				
		7,5	7,8	5,8	4,1	5,3				
	7,2	6,7	7,6	5,4	3,7	5,2	3,5			
	6,3	5,1	6,8	4,3	2,5	4,7	3,4			
	5,7	4,8	6,4	2,7	1,8	4,6	2,4			
LOW	7,3	3,8	3,1	2,6	1,7	1,6	4,5	1,5	5,6	
	2,3	3,2	2,8	2,1	1,3	1,2	3,6	1,4	4,2	HIGH
	1	2	3	4	5	6	7	8	9	

FACTOR #3

STATION #5		HIGH								
LOW	3,2	3,4	5,2	6,5	1,3	2,5	8,1	1,6	1,2	
	7,3	3,1	4,6	5,3	1,7	1,8	2,4	6,1	2,8	
	1,5	8,5	6,7	2,7	2,6	5,8	5,7			
	2,3	5,6	3,5	4,8	7,5	4,2	5,4			
	6,2	6,3	4,3	3,8	2,1	6,4	5,1			
		7,2	3,6	8,4	3,7	7,8				
		8,6	8,2	7,1	4,7	6,8				
			8,3	8,7	4,1					
			7,6	4,5	1,4					

STATION #5

FACTOR #4



STATION #5

FACTOR #6

				7,2					
			5,6	2,8	4,2				
			3,2	7,1	7,8				
		6,5	4,3	4,7	2,5	6,1			
		3,8	2,4	6,8	4,1	6,2			
	3,4	1,4	1,2	8,4	6,7	8,2	1,8		
	5,8	5,3	3,6	5,2	3,1	1,6	8,3		
	1,3	5,6	4,6	2,7	2,3	7,5	6,4		
4,5	7,4	7,6	8,5	5,1	2,1	1,5	6,3	7,3	
3,7	3,5	8,1	8,7	1,7	4,8	2,6	5,7	5,4	
1	2	3	4	5	6	7	8	9	

LOW

HIGH

STATION #5

FACTOR #8

STATION #5

FACTOR

				8,6				
			8,7	8,4	8,3			
			8,5	7,6	7,5			
		6,1	7,2	5,6	7,1	8,2		
		5,7	6,8	5,3	6,3	7,8		
	6,5	4,8	6,4	4,3	4,7	6,7	7,4	
	6,2	4,6	5,8	3,1	3,7	5,1	4,5	
	5,2	2,7	3,2	1,8	3,5	3,8	4,2	
8,1	2,8	2,6	2,3	1,5	2,4	3,6	4,1	7,3
5,4	2,5	1,3	2,1	1,2	1,6	1,4	1,7	3,4
1	2	3	4	5	6	7	8	9

LOW

HIGH

STATION #5

FACTOR #10

				5,8				
			7,6	8,1	1,7			
			3,8	1,4	7,1			
		1,5	8,7	1,3	4,2	8,5		
		6,1	2,8	4,5	2,5	7,5		
5,1	6,2	8,2	8,6	6,5	4,7	7,3		
4,6	1,6	5,3	2,4	3,7	2,6	3,4		
6,7	1,2	2,3	6,8	1,8	8,4	5,4		
7,4	5,6	5,2	2,1	7,2	4,8	3,5	3,2	3,1
5,7	7,8	3,6	5,8	6,4	8,3	6,3	4,1	4,3
1	2	3	4	5	6	7	8	9

LOW

HIGH

APPENDIX K
FACTOR SCORES

STATION #2

ITEM #

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III 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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VII 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

VIII 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

STATION #5

ITEM #

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III

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IV	<u>FACTORS</u>	V
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4		1
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7		3
6		1
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VIII

[illegible]

VITA

Jeffrey Neil Simon was born March 17, 1944 in Cleveland, Ohio. He attended public schools in Cleveland, and was especially active in Speech and Thespian activities at the high school level. He earned his diploma from Cleveland Heights High School in June, 1962.

With major fields in Speech Education and Psychology and a minor area of emphasis in English, he took his Bachelor of Science Degree from The Ohio State University in Columbus in 1967. Before being awarded a teaching assistantship at Ohio State, he taught for two academic years at Hilliard High School in Hilliard, Ohio. His duties consisted of teaching classes in Speech, Drama and English Literature, as well as coaching the debate team, directing the school theatre productions and advising the Thespian Society. He was graduated from Ohio State in 1969 with a Master of Arts degree in Speech with a major area of emphasis in broadcast and mass communications.

As a faculty member at Millikan University in Decatur, Illinois for three academic years, he taught courses in the mass media, together with other courses in speech fundamentals and oral interpretation of literature. It was

during this time, too, that he helped the students construct a ten-watt, FM, educational radio station, which is now an integral part of the community. He was also awarded a teaching assistantship at Louisiana State University while working toward the Ph.D.

His practical experience in broadcast and mass communications includes work in both the print and electronic media. He wrote an editorial column in a weekly newspaper, The Decatur Tribune and he worked in news, production, continuity and traffic at WDZ radio in Decatur. His television experience in that city includes work as a news reporter, substitute anchorman, announcer and on-camera production talent at WAND-TV, an ABC affiliate. As Operations Manager at WCMY radio in Ottawa, Illinois, he was responsible for overseeing the entire day-by-day operation of the station. It was here, too, that he hosted a one-hour interview program on a five-day-a-week basis. He has also worked as a disc jockey at WJBO radio in Baton Rouge and as a news-production man at WQXY radio in Baton Rouge. Finally, he worked as a staff news reporter at WAFB-TV, a CBS affiliate in Baton Rouge. His additional duties as week-end and substitute anchorman gave him complete responsibility for producing major newscasts as well as delivering them.

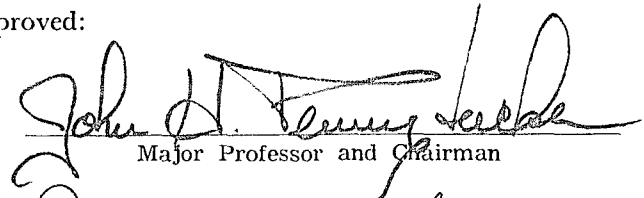
EXAMINATION AND THESIS REPORT

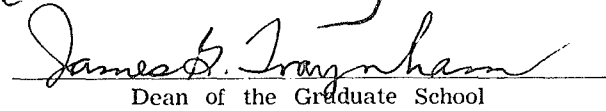
Candidate: **Jeffrey Neil Simon**

Major Field: **Speech**

Title of Thesis: **Real and Ideal Television News Images: A Q-Analysis**

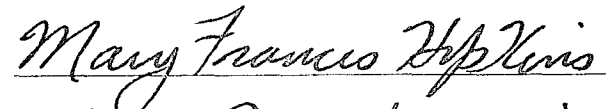
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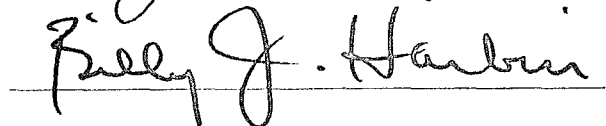

Major Professor and Chairman

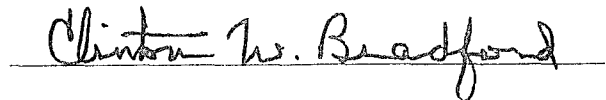

Dean of the Graduate School

EXAMINING COMMITTEE:









Date of Examination:

June 24, 1976